

REGION VIII DATA VALIDATION REPORT INORGANIC

| Case/TDD No. | Site N | Vame | Operable Unit |
|-----------------------|------------------|--------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Min | ing District | |
| RPM/OSC Name | | | · |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | MH35E5 | |

| Review Assigned Date: | December 15, 2010 | Data Validator: | Fred Luck |
|-------------------------|-------------------|------------------|-------------|
| Review Completion Date: | February 18, 2011 | Report Reviewer: | Lesley Boyd |

| Sample ID | Matrix | Analysis |
|-----------|----------|-------------|
| MH35E5 | Sediment | CLP -Metals |
| MH35E6 | | |
| MH35E7 | | |
| MH35E8 | · | |
| MH35E9 | | |
| MH35F0 | | |
| MH35F1 | | |
| MH35F2 | | |
| MH35F3 | · | |
| MH35F4 | | |
| MH35F5 | | |
| MH35F6 | | · . |
| MH35F7 | | |

| Sample ID | Matrix | Analysis |
|-----------|----------|-------------|
| MH35F8 | Sediment | CLP –Metals |
| MH35F9 | | · |
| MH35G0 | · | |
| MH35G1 | .* | |
| MH35G2 | | |
| MH35G3 | · | |
| MH35G4 | | • |

DATA QUALITY STATEMENT

| | • | | |
|---------|---|------------|-------------------------------------|
| () | Data are ACCEPTABLE according to EPA Functional guiby the reviewer. | idelines | with no qualifiers (flags) added |
| () | Data are UNACCEPTABLE according to EPA Functional | l Guidel: | ines. |
| (X) | Data are acceptable with QUALIFICATIONS noted in rev | view. | |
| Telepho | one/Communication Logs Enclosed? Yes | 1 | NoX |
| CLP Pr | | <u>X</u> : | If yes, list the items that require |

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 40755, SDG No. MH35E5, consisted of twenty sediment samples for metals by ICP-AES and ICP-MS (ISM01.2). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|--|-----------|------------|--------------------------|-------------------|
| All Samples | Antimony | U | Blank Contamination | 3 |
| MH35E5, MH35E6, MH35F0, MH35F1, MH35F2, MH35F3, MH35F4, MH35F5, MH35F6, MH35F7, MH35F9, MH35G1, MH35G2, MH35G3, MH35G4 | Beryllium | | | |
| MH35E5, MH35E6, MH35F0, MH35F3, MH35F4, MH35F6, MH35F7, MH35G0, MH35G1, MH35G2 | Cadmium | | | |
| MH35F3, MH35F5, MH35G1 | Calcium | | | |
| MH35F8 | Chromium | | | |
| MH35F8 | Magnesium | | | |
| MH35E9, MH35F0, MH35F8, MH35G1, MH35G3 | Potassium | | | |
| MH35E9, MH35F8 | Silver | | | |
| All Samples | Sodium | | | |
| MH35E5, MH35E6, MH35E7, MH35E8, MH35E9, MH35F0, MH35F1, MH35F2, MH35F3, MH35F4, MH35F5, MH35F6, MH35F8, MH35F9, MH35G1, MH35G3 | Thallium | | | |



| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|---|--|------------|--|-------------------|
| MH35E7, MH35E8, MH35E9, MH35F8, MH35G0 | Beryllium | J+ | Potentially false positive | 4 |
| MH35E5, MH35E6 MH35E7, MH35E8, MH35F1, MH35F2, MH35F3, MH35F4, MH35F5, MH35F6, MH35F7, MH35F9, MH35G0, MH35G2, MH35G4 | Potassium | | detection in ICS check sample | |
| MH35E5, MH35E6, MH35E7, MH35E8, MH35F0, MH35F1, MH35F2, MH35F3, MH35F4, MH35F5, MH35F6, MH35F7, | Silver | | | |
| MH35F9, MH35G0, MH35G1, MH35G2, MH35G3, MH35G4 MH35F7, MH35G0, MH35G2, | | | | |
| MH35G4 | Thallium | | | |
| All Samples | Barium, Zinc | J/UJ | Original &Duplicate both >5x the CRQL and RPD > 20% | 6 |
| | Cadmium | | Original and/or Duplicate < 5x the CRQL and absolute difference > CRQL | |
| | | í | MS 30 - 74%R, Post Digestion Spike $\%R \ge 75\%$ | 7 |
| | Antimony, Selenium, Silver | | MS <30%R, Post Digestion Spike %R ≥ 75% | |
| · | Соррег | J | MS > 125%R, Post Digestion Spike %R ≤ 125% | |
| | Arsenic, Beryllium, Cadmium, Cobalt, Copper, Nickel, Potassium, Sodium, Zinc | | Serial Dilution %D > 10% | 8 |

2.

1. PRESERVATION AND HOLDING TIMES

| All technica | al holding times and preservation criteria were met. |
|------------------------------|--|
| Yes | No_X_ |
| Comments: | The samples were analyzed within 180 days for the ICP metals. According to the Sample Log-In Sheet and case narrative, the two sample coolers were each received at a temperature of 7° C, which is outside the recommended temperature range of $4 \pm 2^{\circ}$ C. The Sample Log-In Sheet further indicates that neither cooler contained a Cooler Temperature Indicator Bottle, as indicated on the form to be required. There is also no indication that SMO was contacted regarding this issue, neither is any documentation of the resolution or indication of how the cooler temperature was derived provided. The TR/COC also did not designate a sample for laboratory QC, but the documentation of the resolution of this issue is provided in the SDG. |
| | When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters. |
| T T | The sampler did not designate a specific sample on the TR/COC for Laboratory QC; in accordance with reported previous Region 8 direction, the laboratory did select a sample (MH35G4) for laboratory QC. The reviewer has not been provided any information regarding PE, field blank, or rinsate samples; therefore cannot evaluate whether the selected sample was a PE, field blank, or rinsate sample. |
| | No other shipping or receiving problems were noted. Chain-of-custody, summary forms, and raw data were evaluated. |
| INSTRUME VERIFICAT | ENT CALIBRATIONS: INITIAL AND CONTINUING CALIBRATION (ICV AND CCV) |
| The initial an SOW require | nd continuing calibration verification standards (ICV and CCV, respectively) met ements. |
| Yes_X_ | No |
| Comments: | None. |
| The calibration cyanide, and | on verification results were within 90-110% recovery for metals, 85-115% for 80-120% for mercury. |
| Yes_X_ | No |
| Comments: | None. |

| | The continuin | g calibration standards were run at 10% frequency or every two hours. |
|----|----------------------------------|---|
| | Yes_X_ | No |
| | Comments: | None. |
| 3. | BLANKS | |
| - | The initial and requirements. | l continuing calibration blanks (ICB and CCB, respectively) met SOW |
| | Yes_X_ | No |
| | Comments: | For the ICP-AES analyses, the ICB was rerun. |
| | The continuing | g calibration blanks were run at 10% frequency. |
| | Yes_X_ | No |
| | Comments: | Continuing calibration blanks were run every 10 samples. |
| | A laboratory/p delivery group | reparation blank was run at the frequency of one per twenty samples, or per sampl (whichever is more frequent), and for each matrix analyzed. |
| | Yes_X_ | No |
| | Comments: | None. |
| ٠. | All analyzed b | lanks were free of contamination. |
| | Yes | No_X_ |

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:



Blank Contaminants

| | | | | Concentration | Associated | Concentration | |
|-------------|------------------|-----------------|----------|----------------|------------------|----------------|--------------------------|
| Blank ID | Contam- inant | CRQL (mg/Kg) | MDL | Found in Blank | Samples | Found in | Qualifier/ Adjustment |
| | шаш | (mg/wg) | (mg/Kg) | (mg/Kg) | | Sample (mg/Kg) | Aujustment |
| PB | Antimony | 1 | 0.0097 | 0.013 | MH35E5 | 1.3 | 2.1 U |
| | | | | | MH35E6 | 0.68 | 1.4 U |
| | | | | | MH35E7 | 0.22 | 1.3 U |
| | | | | | MH35E8 | 0.98 | 1.6 U |
| | | | | | MH35E9 | 0.79 | 1.3 U |
| | | | | | MH35F0 | 0.44 | 1.7 U |
| | 1 | | | | MH35F1 | 1.1 | 1.6 U |
| | | | | • | MH35F2 | 0.56 | 1.4 U |
| | 1 | | | | MH35F3 | 0.87 | 1.6 U |
| |] | | | | MH35F4 | 0.88 | 1.4 U |
| | · | | | | MH35F5 | 1.2 | 1.3 U |
| | • | 1 | | | MH35F6 | 0.38 | 1.5 U |
| | | | | • | MH35F7 | 0.58 | 1.9 U |
| | | | | | MH35F8 | 0.94 | 2.5 U |
| | | 1 | | | MH35F9 | 0.41 | 1.3 U |
| | | | | | MH35G0 | 0.42 | 1.4 U |
| | | | | | MH35G1 | 1.4 | 3.8 U |
| | • | | | | MH35G2 | 0.44 | 1.6 U |
| | | | | | MH35G3 | 0.59 | 1.3 U |
| T- 17- | <u> </u> | | | | MH35G4 | 0.33 | 1.6 U |
| PB | Beryllium | 0.5 | 0.0032 | 0.011 | MH35E5 | 0.44 | 1.0 U |
| | İ | | | • | MH35E6 | 0.33 | 0.72 U |
| | | ŀ | | | MH35F0 | 0.66 | 0.87 U |
| | | - | <i>'</i> | | MH35F1 | 0.39 | 0.78 U |
| | | [| | | MH35F2 | 0.38 | 0.68 U |
| | | | | | MH35F3 | 0.41 | 0.82 U |
| | ļ | | | | MH35F4 | 0.38 | 0.71 U |
| | | | | | MH35F5 | 0.41 | 0.64 U |
| | | | | | MH35F6 | 0.41 | 0.74 U |
| | | | | | MH35F7 | 0.57 | 0.93 U |
| | |] | | | MH35F9 | 0.46 | 0.66 U |
| | | ļ i | | | MH35G1 | 0.29 | 1.9 U |
| | | | | | MH35G2 | 0.47 | 0.78 U |
| | | | | | MH35G3 | 0.46 | 0.64 U |
| PB | Cadmium | 0.5 | 0.0027 | 0.500 | MH35G4 | 0.56 | 0.81 U |
| | Caumum | 0.5 | 0.0027 | 0.500 | MH35E5 | 0.74 | 1.0 U |
| | | | 1 | | MH35E6 | 0.66 | 0.72 U |
| | | | ŀ | | MH35F0 | 0.78 | 0.87 U |
| | : | |] | | MH35F3 | 0.52 | 0.82 U |
| | | | İ | | MH35F4 | 0.47 | 0.71 U |
| · | | | | | MH35F6 | 0.51 | 0.74 U |
| | | | | | MH35F7 | 0.79 | 0.93 U |
| | | | | | MH35G0 MH35G1 | 0.35 | 0.68 U |
| | | | | | MH35G2 | 0.45 | 1.9 U |
| PB | Calcium | 500 | 1.7 | 4.404 | MH35F3 | 0.44 | 0.78 U |
| | Calviani | 500 | 1./ | +V+.+ | MH35F5 | 791 230 | 822 U |
| | ľ | | | . 1 | MH35G1 | 230 1150 | 644 U |
| PB | Chromium | 1 | 0.026 | 1.000 | MH35F8 | 1.6 | 1900 U |
| PB | Magnesium | 500 | 1.2 | 500 | | | 2.5 U |
| LD | Magnesium | 300 | 1.2 | 200 | MH35F8 | 447 | 1240 U |

URS Operating Services, Inc.

| Blank ID | Contam- inant | CRQL (mg/Kg) | MDL (mg/Kg) | Concentration Found in Blank (mg/Kg) | Associated Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-------------|------------------|-----------------|----------------|--|-----------------------|---------------------------------------|--------------------------|
| PB | Potassium | 500 | 5.8 | 55.883 | MH35E9 | 375 | 674 U |
| | | | | | MH35F0 | 842 | 865 U |
| | | | · | | MH35F8 | 209 | 1240 U |
| | | | | | MH35G1 | 1160 | 1900 U |
| | | | | | MH35G3 | 510 | 636 U |
| PB | Silver | 0.5 | 0.0023 | 0.010 | MH35E9 | 0.48 | 0.67 U |
| | | | | | MH35F8 | 0.22 | 1.2 U |
| PB | Sodium | 500 | 0.73 | 18.271 | MH35E5 | 117 | 1040 U |
| | | | | | MH35E6 | 60.2 | 723 U |
| | | | | | MH35E7 | 49.7 | 641 U |
| | | | | | MH35E8 | 92.9 | 814 U |
| | | | | | MH35E9 | 180 | 674 U |
| | | | | | MH35F0 | 58.1 | 865 U |
| | · | | | | MH35F1 | 88.1 | 781 U |
| | | | | | MH35F2 | 75.6 | 676U |
| | | | | | MH35F3 | 76.1 | 822 U |
| | | | | | MH35F4 | 68.7 | 714 U |
| | | | | | MH35F5 | 69.8 | 644 U |
| | | | | | MH35F6 | 90.6 | 741 U |
| : | | | | • | MH35F7 | 109 | 926 U |
| | | | | | MH35F8 | 32.3 | 1240 U |
| | | | | | MH35F9 | 62.4 | 657 U |
| | | i | | | MH35G0 | 56.6 | 684 U |
| | | | | | MH35G1 | 77.5 | 1900 U |
| | | | | | MH35G2 | 100 | 782 U |
| | | | | | MH35G3 | 25.2 | 636 U |
| | | | | | MH35G4 | 94.7 | 813 U |
| PB | Thallium | 0.5 | 0.0015 | 0.007 | MH35E5 | 0.72 | 1.0 U |
| | | | | | MH35E6 | 0.41 | 0.72 U |
| | i | | | | MH35E7 | 0.32 | 0.64 U |
| | | | | | MH35E8 | 0.45 | 0.81 U |
| | | Í | | | MH35E9 | 0.19 | 0.67 U |
| | · | | | | MH35F0 | 0.31 | 0.87 U |
| | | | • | | MH35F1 | 0.62 | 0.78 U |
| | • | | , [| | MH35F2 | 0.41 | 0.68 U |
| | | , | | | MH35F3 | 0.75 | 0.82 U |
| | | | | | MH35F4 | 0.69 | 0.71 U |
| | | | | | MH35F5 | 0.59 | 0.64 U |
| | | | Ì | | MH35F6 | 0.44 | 0.74 U |
| | | | | | MH35F8 | 0.26 | 1.2 U |
| | | | | | MH35F9 | 0.36 | 0.66 U |
| | İ | | | | MH35G1 | 0.43 | 1.9 U |
| | | | - | | MH35G3 | 0.42 | 0.64 U |

4. INDUCTIVELY COUPLED PLASMA - INTERFERENCE CHECK SAMPLE (ICP-ICS)

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV. Yes X No Comments: None. Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ± the CRQL. Yes_X_ No_ Comments: None. Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values or no interference was noted. Yes X No NA Comments: None. Sample results contain potential false positives and false negatives. Yes X No____ The following table lists the elements with potential false positives or false Comments: negatives that resulted in sample qualification, affected samples, and data qualifiers:

ICP Interferences

| Element | Concentration Found in ICSA Sample (ug/L) | Affected Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|------------|---|------------------|---|--------------------------|
| Beryllium | 0.37 | MH35E7 | >MDL | J+ |
| Derymum | 0.57 | MH35E8 | /NIDL | J+ |
| | | MH35E9 | | |
| | 1 | MH35F8 | | |
| | | MH35G0 | · | |
| Potassium | 1020 | MH35E5 | | |
| r Otassium | 1020 | MH35E6 | Ì | |
| | | MH35E7 | | |
| | | MH35E8 | | |
| | | MH35F1 | | |
| | İ | MH35F2 | İ | |
| | | MH35F3 | | ļ · |
| | · | MH35F4 | | |
| | | MH35F5 | | |
| | | MH35F6 | | |
| | | MH35F7 | | |
| | | MH35F9 | | |
| | | MH35G0 | | 1 |
| | · | MH35G2 | | |
| | | MH35G4 | | |
| O.1 | 0.015 | MH35E5 | | ļ |
| Silver | 0.015 | MH35E6 | | |
| | | MH35E7 | | |
| | | MH35E8 | | |
| | | MH35F0 | |] |
| | | MH35F1 | | |
| | l | MH35F2 | | |
| | | MH35F3 | | |
| | | MH35F4 | | ! |
| | 1 | MH35F5 | | |
| | | MH35F6 | | |
| | | MH35F7 | | į |
| | | MH35F9 | | |
| | | MH35G0 | | |
| • | | MH35G1 | | |
| | | MH35G2 | | |
| | | MH35G3 | | ļ |
| | | MH35G4 | | |
| Paris 144 | | MH35F7 | • | |
| Thallium | 0.056 | MH35G0 | | |
| | | MH35G2 | | |
| | | MH35G4 | | |

6.

5. LABORATORY CONTROL SAMPLE

| | control sample (LCS) was prepared and analyzed with every twenty or fewer milar matrix, or one per sample delivery group (whichever is more frequent). |
|----------------------------------|--|
| Yes_X_ | No |
| Comments: | None. |
| All results wer | e within control limits OF 70-130%. |
| Yes_X_ | No |
| Comments: | None. |
| FORM 6 & 12 | 2 - DUPLICATE SAMPLE ANALYSIS |
| Duplicate samp | ble analysis was performed with every twenty or fewer samples of a similar matrix ple delivery group (whichever is more frequent). |
| Yes_X_ | No NA |
| Comments: | None. |
| The RPDs were | e calculated correctly. |
| Yes_X_ | No NA |
| Comments: | None. |
| For sample con ±35% apply for | centrations greater than five times the CRQL, RPDs were within ±20% (limits of soil/sediments/tailings samples). |
| Yes | No_X NA |
| Comments: | The following table lists the duplicate results outside control limits, samples affected, and data qualifiers: |

| Element | RPD | QC Lim | iit Samples Affe | cted Qualifiers |
|---------|-----|--------|------------------|-----------------|
| Barium | 57% | 20% | All samples | J/UJ |
| Zinc | 75% | | | |
| | | | | |

| For sample concentrations less than five times the CRQL, duplicate analysis | s results were with | iin |
|---|---------------------|-----|
| the control window of CRQL (absolute difference < CRQL for soils). | | |
| | | |

Yes____ No_X NA___

Comments:

The following table lists the duplicate results outside control limits, samples

affected, and data qualifiers:

| Element | Sample / Duplicate Result (mg / Kg) | % RPD | 5x CRQL (mg/Kg) | Samples Affected | Qualifiers |
|---------|--|-------|--------------------|---------------------|------------|
| Cadmium | 2.73 / 1.13 | 83 % | 2.5 | All samples | J/UJ |

7. SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No___ NA___

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No__ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes___ No_X

Comments: The following table lists the spike recoveries outside control limits, post

digestion spike recoveries, samples affected, and data qualifiers:

| UOS | |
|-----|--|
|-----|--|

| Element | Matrix Spike %R | Post-Digestion %R | Samples Affected | Qualifiers |
|----------|---|----------------------|------------------|------------|
| | J/UJ | | | |
| Cadmium | 61% | 83% | | |
| Copper | 182% | 77% | | J |
| Selenium | 6% | 114% | | J/UJ |
| Silver | %R %R 13% 168% All samples 61% 83% J/UJ 182% 77% J 6% 114% J/UJ | | | |

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

| Yes_X_ | No | NA |
|-----------|-------|----|
| | | |
| Comments: | None. | |

8. ICP SERIAL DILUTION

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_ No___ Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Yes___No_X_

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:



| Element | % Difference | Samples Affected | Qualifiers |
|-----------|--------------|------------------|------------|
| Arsenic | 30% | All samples | J |
| Beryllium | 14% | | |
| Cadmium | 11% | | |
| Cobalt | 13% | | |
| Copper | 18% | | |
| Nickel | 15% | | |
| Potassium | 19% | | - |
| Sodium | 30% | | |
| Zinc | 30% | | |

9. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

Yes__ No_ NA X

Comments: The SDG shows no indication of EPA Region 8 initiating any additional QA /

QC.

10. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No___

Comments: None.

11. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No___

Comments: None.

12. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes_X_ No___

Comments: None.



13. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
- J+ The associated numerical value is an estimated quantity but the result may be biased high.
- J- The associated numerical value is an estimated quantity but the result may be biased low.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value.

 The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA Atomic Absorption

Ag Silver

CCB Continuing Calibration Blank

CCV Continuing Calibration Verification

CFR Code of Federal Regulations
CLP Contract Laboratory Program
CRA CRQL standard required for AA

CRQL Contract Required Quantitation Limit

CRI CRQL standard required for ICP

CV Cold Vapor

EPA U.S. Environmental Protection Agency
GFAA Graphite Furnace Atomic Absorption

Hg Mercury

ICB Initial Calibration BlankICP Inductively Coupled PlasmaICS Interference Check Sample

ICSA Interference Check Sample (Solution A)
ICSAB Interference Check Sample (Solution AB)

ICV Initial Calibration Verification
LCS Laboratory Control Sample

LRA Linear Range Verification Analysis

MDL Method Detection Limit
PDS Post Digestion Spike

QC Quality Control

RPD Relative Percent Difference RPM Regional Project Manager

RSD Percent Relative Standard Deviation

SA Spike Added

SAS Special Analytical Services SDG Sample Delivery Group

SOW Statement of Work SR Sample Result

SSR Spiked Sample Result

| | OPHILL TILL | 110. |
|---|-------------|------|
| · | MH35E5 | |

| Lab Name | : ALS Labora | tory Group | Contract: I | EPW090 |)36 | | |
|------------------------|--------------|---------------------------------------|---------------------------------------|--------------|--------------|-----------------|---------------------------------------|
| Lab Code | : DATAC | | Mod. Ref. | No.: _ | SD | G No.: M | IH35E5 |
| Matrix: | Soil | | Lab Sample | ID: | 1030768001 | - | |
| % Solids | : 48.3 | | Date Recei | ved:] | 11/03/2010 | | |
| | | | | | | | |
| Concentr | ation Units | (ug/L, ug or m | mg/kg dry weigh | ıt): mç | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 6860 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | - | | |
| | 7440-39-3 | Barium | | | <u> </u> | | |
| | 7440-41-7 | Beryllium | - | | | - | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1100 | | | P | |
| | 7440-47-3 | Chromium | · · · · · · | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | • | | |
| | 7439-89-6 | Iron | 78100 | | | P | |
| | 7439-92-1 | Lead | | | , | | |
| | 7439-95-4 | Magnesium | 3030 | | | P | |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | |
| | 7440-09-7 | Potassium | 1700 | | E | P | I+ M 1040 L 2 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | · • · • • · | | • | | |
| | 7440-23-5 | Sodium | 117. | J | E | P | 1040 L |
| | 7440-28-0 | Thallium | · · · · · · · · · · · · · · · · · · · | | | | , |
| | 7440-62-2 | Vanadium | | | , | | ^ - |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | · · · · · · · · · · · · · · · · · · · | | | | | • |
| Color Be | fore: BROWN | Clarity | Before: | | Texture: | MEDIUM | · · · · · · · · · · · · · · · · · · · |
| Color Af | ter: YELLOW | Clarity | After: CLEAR | | Artifact | s: 🤼 | <u> </u> |
| Jammant - | _ | | | | | | |
| Comments | | 3 | | | | - a m f a m a = | |
| $\mathtt{E}\colon The$ | reported v | alue is estima | ted due to the | prese | ence of int | erreren | ce. |
| | | | | | | | |

| MH35E5 | |
|--------|--|
| rmoono | |

| | | | | | L | | | | |
|----------|-------------------------|-----------------|-----------------|-------|-----------------|-------|-------------------|----------------------|-----------------------|
| ab Name | : ALS Labora | tory Group | Contract:] | EPW09 | 036 | | _ | | |
| ab Code | : DATAC Case No.: 40755 | | Mod. Ref. | No.: | SDG No.: MH35E5 | | | 5 | |
| Matrix: | Soil | | Lab Sample | ID: | 1030768001 | | | | |
| Solids | : 48.3 | | Date Recei | ved: | 11/03/2010 | | | | |
| | ····- | ···· | | | | | | | |
| Concentr | ation Units | (ug/L, ug or m | ıg/kg dry weigh | t): n | ıg/kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | | |
| | 7429-90-5 | Aluminum | | | | | 1. | + | th |
| | 7440-36-0 | Antimony | 1.3 | J | N | MS | 121 | UI | * (|
| | 7440-38-2 | Arsenic | 45.3 | | E | MS | I | UI | , |
| | 7440-39-3 | Barium | 559. | | * | MS | I | N | n . |
| | 7440-41-7 | Beryllium | 0.44 | J | E | MS | I / ^ | /) l | ~ |
| | 7440-43-9 | Cadmium | 0.74 | J | *NE | MS | 1.0 | の子 | W |
| | 7440-70-2 | Calcium | | | | |] | | - 11 I |
| | 7440-47-3 | Chromium | 6.6 | | * | MS | 于 | — Il U | رحم 3(۱ |
| | 7440-48-4 | Cobalt | 3.9 | | E | MS | 3 | N | |
| | 7440-50-8 | Copper | 48.7 | | NE | MS | 1 | m | |
| | 7439-89-6 | Iron | | | | |] | | |
| | 7439-92-1 | Lead | 459. | | | MS |] | | |
| | 7439-95-4 | Magnesium | | | | | | | - - 12, |
| | 7439-96-5 | Manganese | 333. | | * | MS |] { | | 13 |
| | 7439-97-6 | Mercury | | | | | | 4 | |
| | 7440-02-0 | Nickel | 3.4 | | E | MS |]] | W | |
| | 7440-09-7 | Potassium | | | | |] . | | 0 |
| | 7782-49-2 | Selenium | 1.6 | J | - N | MS |] 5, 2 | -03 | |
| | 7440-22-4 | Silver | 4.5 | | N | MS |] I + | - 14 | ; |
| | 7440-23-5 | Sodium | | | | | 1 | _ | 2 |
| | 7440-28-0 | Thallium | 0.72 | J | | MS | 1.0 | U | 7 .) |
| | 7440-62-2 | Vanadium | 49.7 | | * | MS | J-F- | U 9 | 123 |
| | 7440-66-6 | Zinc | 205. | - 10 | *E | MS | J | 7 1 | .7 |
| | 57-12-5 | Cyanide | | | | | | 1/12 | 8 [u |
| | | | | | | | | ι | ٠ |
| | | | | | | | | | |
| color Be | fore: ORANGE | Clarity | Before: | | Texture: M | EDIUM | _ | | |
| | ter: WHITE | | After: CLOUD | | | "- | | | |
| | | | | .=- | | | | | |
| Comments | | | | | | | | | |
| E: The | e reported v | alue is estimat | ted due to the | pres | sence of inter | feren | ice. | | |
| | - 1 | | | | | | | | |

| MH35E6 | |
|--------|--|

| o Code | : DATAC C | Case No.: 4075 | 5 Mod. Ref. | Mod. Ref. No.: SDG No. | | | | |
|----------|--------------|----------------|-----------------|------------------------|-------------|--------|-------------|--|
| trix: | Soil | | Lab Sample | ID: <u>1</u> | 030768002 | | | |
| Solids | : 69.2 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | | |
| | | ··· | | | | | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | /kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 7030 | | ** . | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1010 | | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 68800 | | | P | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 4080 | | | P | | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | N | |
| | 7440-09-7 | Potassium | 889. | | E | P | J+ 70 723 L | |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 60.2 | J | E | P | 7236 | |
| | 7440-28-0 | Thallium | | | | | 91 | |
| | 7440-62-2 | Vanadium | | | | | ~/ | |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | ····· | | | | | | | |
| olor Be | fore: BROWN | Clarit | y Before: | ٠ | _ Texture: | MEDIUM | | |
| -1-~ 7\£ | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts | • | | |
| DIOL AL | rer: IETTOM | CIALLO | y Arter: CLEAK | | _ ALCITACUS | • | | |
| omments | <u>.</u> | | | | | | | |
| | | zalna ie oetim | ated due to the | nrese | nce of inte | rferen | ce. | |
| <u> </u> | · TOPOTOGA (| CLUC ZO COCIN | accu due de che | 2200 | | | | |

| | _ |
|--------|---|
| MH35E6 | |

| T - }- N | arc Tabasa | + C | Contract. | י מינים ב | 2036 | | |
|-----------|--------------|---------------|-----------------|-----------|----------------|---------------|---|
| Lab Name | : ALS Labora | tory Group | Contract: I | SEWUS | 9036 | | ···· |
| Lab Code | : DATAC C | ase No.: 4075 | 5 Mod. Ref. | No.: | SDG | No.: <u>1</u> | 4H35E5 |
| Matrix: | Soil | | Lab Sample | ID: | 1030768002 | | |
| % Solids | : 69.2 | | Date Recei | ved: | 11/03/2010 | | |
| | | | | | | | |
| Concentra | ation Units | (ug/L, ug or | mg/kg dry weigh | t): 1 | ng/kg | | |
| | | | G | | Τ ο | 1 1/4 | 1 |
| | CAS No. | Analyte | Concentration | С | Q | M | _ |
| | 7429-90-5 | Aluminum | | | | 1 | 1.4 UJZ J J J J J J J J J J J J J J J J J J J |
| | 7440-36-0 | Antimony | 0.68 | J | N | MS | 1.901 |
| | 7440-38-2 | Arsenic | 34.1 | | E | MS | 1 7 |
| | 7440-39-3 | Barium | 210. | | * | MS | 1 2011 11 |
| | 7440-41-7 | Beryllium | 0.33 | J | E | MS | 0.120 |
| | 7440-43-9 | Cadmium | 0.66 | J | *NE | MS | JOHAU |
| | 7440-70-2 | Calcium | | | | | 1 2/11 A |
| | 7440-47-3 | Chromium | 6.4 | | * | MS | 7 11111 |
| | 7440-48-4 | Cobalt | 4.3 | | E | MS | |
| | 7440-50-8 | Copper | 53.0 | | NE | MS | J # |
| | 7439-89-6 | Iron | | | | | _ |
| | 7439-92-1 | Lead | 322. | | | MS | <u>]</u> |
| | 7439-95-4 | Magnesium | | | | | 12/2/2/11 |
| | 7439-96-5 | Manganese | 506. | | * | MS | F |
| | 7439~97-6 | Mercury | | | | | ي ا |
| | 7440-02-0 | Nickel | 4.0 | | E | MS | J 7 |
| | 7440-09-7 | Potassium | | | | | W . 11 |
| | 7782-49-2 | Selenium | 0.81 | J | N | MS |] 3,6 0° I " |
| | 7440-22-4 | Silver | 2.5 | | N | MS |]] + # |
| | 7440-23-5 | Sodium | | | | | 0.1 |
| | 7440-28-0 | Thallium | 0.41 | J | | MS | 0.120 1 3/9/11 |
| | 7440-62-2 | Vanadium | 44.8 | | * | MS | 7 7 |
| | 7440-66-6 | Zinc | 199. | | *E | MS |] J (a) |
| | 57-12-5 | Cyanide | | | | | 3.60 I # 3.60 I # 3+ # 0.72 U # 1 2/18/11 |
| | | | | | | |] |
| | | | | | | | |
| ' | | .1 | 11, 117-307 | | | • | - |
| Color Be | fore: ORANGE | Clarit | y Before: | - | Texture: N | <u> EDIUM</u> | <u> </u> |
| Color Af | ter: BROWN | Clarit | y After: CLEAR | | Artifacts | : | |
| Comments | | | | | | | |
| | - | | | ~ ~~ ~ | ango of into | efores | 200 |
| E: The | reported v | alue is estim | ated due to the | pres | sence of fuce: | reren | ice. |
| | | | | | | | |
| | | | | | | | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| MH35E7 | |
|--------|--|

| Lab Code | e: DATAC (| Case No.: 4075 | Mod. Ref. | No.: _ | SDG 1 | No.: M | 1H35E5 | |
|----------|----------------|----------------|-----------------|---------|---------------|----------|--------|------------|
| Matrix: | Soil | | Lab Sample | ID: 1 | 1030768003 | | | |
| % Solids | s: <u>78.0</u> | | Date Recei | ved: 1 | 11/03/2010 | | | |
| Concent | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 8570 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | ĺ | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 2560 | | | P |] | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 20800 | | | P | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 5610 | | | P |] | - |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | 14 |
| | 7440-09-7 | Potassium | 745. | | E | P | J+ | 7.0 |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | ٠ | W |
| | 7440-23-5 | Sodium | 49.7 | J | E | P | 641 | DIE |
| | 7440-28-0 | Thallium | , | | | | | M 2/18/ |
| | 7440-62-2 | Vanadium | | | | | | 4101 |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | <u>.</u> | | *** | | | |
| | | | | | | <u> </u> | | |
| Color Be | efore: BROWN | Clarit | y Before: ·- | | _ Texture: M | EDIUM | | _ |
| Color Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | | |
| | | | | | | | | |
| Comments | | | | | | | | |
| E: Th | e reported v | alue is estim | ated due to the | prese | ence of inter | feren | ce. | |

| LILA | 3 5 | マフ | |
|-------|-------|--------|--|
| IVI H | . 3.7 | 3 H. 1 | |

| | | | | | | MH35 | E7 | |
|--------------------|---------------|----------------|-------------------|----------|---------------|----------|---|--------------|
| Lab Name | : ALS Labora | atory Group | Contract: 1 | EPW090 | 36 | | | |
| Lab Code | : DATAC C | Case No.: 4075 | 5 Mod. Ref. | No.: _ | SDG 1 | 1 :.oV | MH35E5 | |
| Matrix: | Soil | · | Lab Sample | ID: | 1030768003 | | | |
| % Solids | : 78.0 | | Date Recei | ved: [| 11/03/2010 | | | |
| G | -1-1-1 TT-1-1 | //T | mar/har dan naiah | t-) + mc | r/lea | | | |
| Concentr | | 1 7 | mg/kg dry weigh | | | T | 7 | |
| | CAS No. | Analyte | Concentration | С | Q | M | | |
| | 7429-90-5 | Aluminum | | | | ļ | 1,3 UTM 1,3 UTM 1,4 H | |
| | 7440-36-0 | Antimony | 0.22 | J | N | MS | 11305 | |
| | 7440-38-2 | Arsenic | 5.9 | | E | MS MS | 13 % | |
| | 7440-39-3 | Barium | 108. | | * | | 1 1 | |
| | 7440-41-7 | Beryllium | 1.0 | | E | MS | 3 + 2 | |
| | 7440-43-9 | Cadmium | 5.8 | | *NE | MS | 17 % | |
| | 7440-70-2 | Calcium | | | | | Kal | A |
| | 7440-47-3 | Chromium | 6.5 | | * | MS | 大大 | 4 113 |
| | 7440-48-4 | Cobalt | 10.9 | | E | MS | 12 % | |
| | 7440-50-8 | Copper | 119. | | NE | MS | ↓ → ~ | |
| | 7439-89-6 | Iron | | | | <u> </u> | - | |
| | 7439-92-1 | Lead | 612. | | | MS | · | |
| | 7439-95-4 | Magnesium | • | | | | - AKA | 3/9/11 |
| | 7439-96-5 | Manganese | 6750 | | D* | MS | 13. | |
| | 7439-97-6 | Mercury | | | | <u> </u> | | |
| | 7440-02-0 | Nickel | 8.2 | | E | MS | 12 M | |
| | 7440-09-7 | Potassium | | | | <u> </u> | - 70 - | -Th |
| | 7782-49-2 | Selenium | 0.099 | J | N | MS | 3 .2.0 4 | 1 |
| | 7440-22-4 | Silver | 1.5 | | N | MS | 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| | 7440-23-5 | Sodium | | | ** | <u> </u> | - 111 11 | 7 |
| | 7440-28-0 | Thallium | 0.32 | J | | MS | 0,640 | 1 1 1 2 Az |
| | 7440-62-2 | Vanadium | 30.6 | | * | MS | 24 | , |
| | 7440-66-6 | Zinc | 1470 | | D*E | MS | 0,64 U M J M H | lt . |
| | 57-12-5 | Cyanide | | | | | 7/10/1 | • |
| | | | | | | | | |
| | | | | | | | _ | |
| Color Be | fore: BLACK | Clarit | y Before: | | Texture: M | EDIUM | 1 | |
| Color Af | ter: COLORLE | SS Clarit | y After: CLEAR | | Artifacts: | | | |
| | _ | | | | | | | |
| Comments F: The | | alue is estima | ated due to the | prese | ence of inter | feren | ice. | |
| <u> </u> | . reported v | arac ro cocami | acca and to the | 22000 | | | | |
| | | | | | | | | |

EPA SAMPLE NO.

MH35E8

| | | | | | Ĺ | MHJ. | JEO | |
|-----------|-------------|----------------|----------------------|--|------------|---|------------------|-------------|
| Lab Name | : ALS Labor | atory Group | Contract: | EPW09 | 036 | | | |
| Lab Code | : DATAC | Case No.: 407 | 55 Mod. Ref. | No.: | | SDG No.: | MH35E | 5 |
| Matrix: | Soil | | Lab Sample | e ID: | 10307680 | 04 | | |
| % Solids | : 61.4 | | Date Recei | .ved: | 11/03/20 | 10 | | |
| Congonta | ntion Unite | . (ua/ĭ ua or | ma (lea dans real ab | a+\ | or / le or | | | |
| Concentr | | s (ug/L, ug or | mg/kg dry weigh | 16) : IR | 97 kg | | | |
| | CAS No. | Analyte | Concentration | C | Q | М | | |
| | 7429-90-5 | Aluminum | 12300 | | | Р | 7 | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| i | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 2010 | | | Р | | |
| | 7440-47-3 | Chromium | | | | | 7 | |
| | 7440-48-4 | Cobalt | | 1 | | | 7 | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 58100 | 1 1 | | P | 7 | |
| | 7439-92-1 | Lead | | | | * | | |
| | 7439-95-4 | Magnesium | 4270 | | | Р | 1 | |
| | 7439-96-5 | Manganese | | | | | - - | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | 1 | | | | - |
| | 7440-09-7 | Potassium | 1260 | | E | P | 17+ | 41 |
| | 7782-49-2 | Selenium | | | | - - | ∀ `` | |
| | 7440-22-4 | Silver | | | | | 1 | -/ |
| | 7440-23-5 | Sodium | 92.9 | J | E | | 214 | 2/18 |
| Ì | 7440-28-0 | Thallium | | - | | | 10 | 1. |
| ŀ | 7440-62-2 | Vanadium | - | | | | 1 | 2/181 |
| | 7440-66-6 | Zinc | | | | | | -{ |
| | 57-12-5 | Cyanide | | | | | - | |
| | 37 12 3 | Cyanitae | * | | | | - | |
| 1 | - | | | | | | - | |
| L | | | | LL | | | | |
| Color Bei | fore: BROWN | Clarii | ty-Before: | | Textur | e: MEDIUN | Л | |
| 000 20. | | 01411 | <u> </u> | | | 1122101 | | |
| Color Aft | ter: YELLOW | Clari | ty After: CLEAR | | _ Artifa | cts: | | |
| Comments: | | | | | | | | |
| | | value is estim | mated due to the | prese | ence of i | nterfere: | nce. | |
| | | | | | | | | |
| - | | | | | | | | |
| | | | | | | | | |

| | |
|--------|--|
| MH35E8 | |

| ab Name | e: ALS Labora | atory Group | Contract: 1 | EPW090 | 036 | | | |
|---------|----------------|----------------|-----------------|-----------------------------|---------------------------------------|-------------|----------|------------|
| ab Code | E: DATAC C | Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH3 | | | | |
| atrix: | Soil | | Lab Sample | ID: | 1030768004 | | | |
| Solids | s: <u>61.4</u> | | Date Recei | ved: | 11/03/2010 | | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | it): mg | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | - |
| | 7440-36-0 | Antimony | 0.98 | J | N | MS | 1.6 | DI |
| | 7440-38-2 | Arsenic | 27.3 | | E | MS | | UIN |
| | 7440-39-3 | Barium | 261. | | * | MS | Ī | 11 |
| | 7440-41-7 | Beryllium | 0.89 | | E | MS | J+ | 22 |
| | 7440-43-9 | Cadmium | 2.0 | | *NE | MS | 1 | n |
| | 7440-70-2 | Calcium | | | | | 1 | |
| | 7440-47-3 | Chromium | 5.6 | | * | MS | 7 | 71 3 |
| | 7440-48-4 | Cobalt | 12.3 | | E | MS | 工工 | nº |
| | 7440-50-8 | Copper | 1.67. | | NE | MS | | U |
| | 7439-89-6 | Iron | <u> </u> | | · · · · · · · · · · · · · · · · · · · | T | 1 | |
| | 7439-92-1 | Lead | 734. | | | MS | 1 | |
| | 7439-95-4 | Magnesium | | | ··· | | 1 | ، میسید |
| - | 7439-96-5 | Manganese | 2710 | | D* | MS | W | 3/9 |
| | 7439-97-6 | Mercury | A-44 T. | | | 1 | 1 | |
| | 7440-02-0 | Nickel | 5.2 | | E | MS | 11 | K |
| | 7440-09-7 | Potassium | | | · · | ····· | 1 | as |
| | 7782-49-2 | Selenium | 0.52 | J | N | MS | 141 | <i>₩</i> . |
| | 7440-22-4 | Silver | 2,8 | | N | MS | 17+ | |
| | 7440-23-5 | Sodium | | | ······ | | 1 . | _ |
| | 7440-28-0 | Thallium . | 0.45 | J | | MS | 10.8 | 310 |
| | 7440-62-2 | Vanadium . | 41.1 | | * | MS | | 7 |
| | 7440-66-6 | Zinc | 447. | | *E | MS | Ì | 310 |
| | 57-12-5 | Cyanide | | | **** | 1 | 1 | 3/18 |
| | <u> </u> | | | | | | 1 | · t |
| | | | | | | |] | |
| lor Be | efore: ORANG | E Clarit | y Before: | | Texture: M | EDIUM | <u> </u> | |
| | ter: TAN | | y After: CLEAR | | Artifacts: | | | |
| | <u> </u> | | | | | | | |
| omments | | | | | | _ | | |
| F - Th | e reported : | value is estim | ated due to the | pres | ence of inter | ferer | ice. | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| MH35E9 | |
|--------|--|
| | |
| | |

| | | Case No.: <u>407</u> | • | • | | | | |
|-------|------------------------|----------------------|------------------|---------------|-----------|--|----------|-----|
| trix: | Soil | | Lab Sample | TD: T | 030768005 | · · · · · · · · · · · · · · · · · · · | | _ |
| Solid | ls: 74.2 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | | _ |
| ncent | ration Units | ug/L, ug o | mg/kg dry weigh | ıt): mg | /kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 8000 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | <u> </u> | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | _ | |
| | 7440-43-9 | Cadmium | | | | | - | |
| | 7440-70-2 | Calcium | 2050 | | | P | 1 | |
| | 7440-47-3 | Chromium | | | | _ | 4 | |
| | 7440-48-4 | Cobalt | | <u> </u> | | | | |
| | 7440-50-8 | Copper | 0.000 | | | | 4 | |
| | 7439-89-6 | Iron | 26000 | | | P | - | |
| | 7439-92-1 7439-95-4 | Lead Magnesium | 3730 | <u> </u> | | p | - | |
| - | 7439-95-4 | Manganese | 3730 | | - | | · | - |
| | 7439-97-6 | Mercury | | | | - | - | |
| | 7440-02-0 | Nickel | - | | | 1 | 1 | |
| | 7440-09-7 | Potassium | 375. | J | E | P | 674 | Ü |
| | 7782-49-2 | Selenium | 1 | | | | 0'' | _ |
| | 7440-22-4 | Silver | | | | | | , |
| | 7440-23-5 | Sodium | 180. | J | E | P | 6741 | ٔ ر |
| | 7440-28-0 | Thallium | | | | |] ' ' | 2 |
| | 7440-62-2 | Vanadium | | | | | 1 | |
| | 7440-66-6 | Zinc | | | | | 1 | |
| | 57-12-5 | Cyanide | | | | |] | |
| | | | | | | | | |
| | | Ì | | | | |] | |
| _ | 5 | | | | | | | |
| or B | efore: BROWN | | ty Before: | | Texture: | MEDIOM | | |
| or A | fter: YELLOW | Clari | ty After: CLEAR | | Artifacts | ·: | | _ |
| | | | | | | | | |
| ment: | | | mated due to the | | - | _ | | |

INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO.

| | |
|--------|--|
| MH35E9 | |

| Lab Nam | e: ALS Labor | atory Group | Contract:] | Contract: EPW09036 | | | | |
|---------|--------------|-----------------------|-----------------|---|-----------|----------------|------------------|--|
| Lab Cod | e: DATAC | Case No.: <u>4075</u> | 5 Mod. Ref. | No.: _ | SDG | No.: No.: | MH35E5 | |
| Matrix: | Soil | | Lab Sample | ID: <u>1</u> | 030768005 | | | |
| % Solid | s: 74.2 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | | |
| Concent | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | /kg | - 1 | 1 | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | * | | | | 1 1/ | |
| | 7440-36-0 | Antimony | 0.79 | J | N | MS | 1.3 USA 5-1 M | |
| | 7440-38-2 | Arsenic | 14.2 | | DE | MS | J M | |
| | 7440-39-3 | Barium | 79.3 | | * | MS | 丁布 | |
| | 7440-41-7 | Beryllium | 0.75 | | E | MS | 丁十九 | |
| | 7440-43-9 | Cadmium | 0.97 | | *NE | MS | J 22 | |
| | 7440-70-2 | Calcium | | | | | 1) A- | |
| | 7440-47-3 | Chromium | 6.9 | | D* | MS | T H 3/2/11 | |
| | 7440-48-4 | Cobalt | 11.0 | | DE | MS | I | |
| | 7440-50-8 | Copper | 201. | | DNE | MS | I n | |
| | 7439-89-6 | Iron | | | • | | | |
| | 7439-92-1 | Lead | 187. | *************************************** | | MS | 1 | |
| | 7439-95-4 | Magnesium | | | | | 1 2. | |
| • | 7439-96-5 | Manganese | 1160 | | D* | MS | 3/9/11 | |
| | 7439-97-6 | Mercury | | ···· | | | · ' | |
| | 7440-02-0 | Nickel | 5.9 | | DE | MS | 7 2 | |
| | 7440-09-7 | Potassium | | | | 1 | . ` بہر ` أ | |

| Color | Before: ORANGE | Clarity Before: | W-1-10 01010 | Texture: MEDIUM | 14 |
|--------|-------------------------------|-----------------|---------------|---------------------|----|
| Color | After: COLORLESS | Clarity After: | CLEAR | Artifacts: | |
| Commer | nts: The reported value is | s estimated due | to the presen | ce of interference. | |
| | | | | | |

0.45

0.48

0.19

36.1

289.

J

J

J

DN

N

D*

D*E

MS

MS

MS

MS

7782-49-2

7440-22-4

7440-23-5

7440-28-0

7440-62-2

7440-66-6

57-12-5

Selenium

Silver

Sodium

Thallium

Vanadium

Cyanide

Zinc

| M | 135F0 | |
|---|-------|--|

| ab Name | : ALS Labora | tory Group | Contract: | EPW0903 | 36 | | |
|----------|---|----------------|-----------------|---------------|-------------|---------------|----------|
| ab Code | : DATAC C | Case No.: 4075 | 5 Mod. Ref. | Νο.: | SDG | No.: <u>N</u> | M35E5 |
| atrix: | Soil | | Lab Sample | ID: <u>10</u> | 30768006 | | |
| Solids | : 57.8 | | Date Recei | ved: 11 | /03/2010 | | |
| | *************************************** | | | - | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg/ | kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 11600 | | | Р | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | 1 | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1810 | | | P | _ |
| | 7440-47-3 | Chromium | | | | | · · |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 44300 | | | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 6090 | | | P | |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | 0,000 |
| | 7440-09-7 | Potassium | 842. | | E | P | 865 U |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | ر سور د |
| | 7440-23-5 | Sodium | 58.1 | J | E | P | 865 U |
| | 7440-28-0 | Thallium | | | | | 1 2/1 |
| | 7440-62-2 | Vanadium | | | | | |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | 1 | <u>.</u> |
| | `` | | | | | | |
| olor Be | fore: BROWN | Clarit | y Before: | | Texture: M | EDIUM | 13.7 |
| olor Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | |
| | | | | | | | |
| Comments | | | | | | r | |
| E: The | reported v | alue is estima | ated due to the | presen | ce of inter | ieren | ce. |
| | | | | | | | |

| | | | | - |
|----|---------------|----|-----|----|
| | | | _ | _ |
| Mi | - 1 '- | ١, | H I | 11 |

| ab Name: ALS Laboratory Group | | Contract: | Contract: EPW09036 | | | | | |
|-------------------------------|----------------|----------------|--------------------|----------------|---------------|-----------------|-----------|--|
| ıb Code | e: DATAC (| Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: | | SDG No.: MH35E5 | | |
| atrix: | Soil | | Lab Sample | ID: | 1030768006 | | | |
| Solids | s: <u>57.8</u> | | Date Recei | ved: | 11/03/2010 | | | |
| oncentr | ation Units | (ua/L. ua or | mg/kg dry weigh | ı±): π | na/ka | | | |
| | CAS No. | Analyte | Concentration | С | Ω | М | 7 | |
| | 7429-90-5 | Aluminum | | | | | + | |
| | 7440-36-0 | Antimony | 0.44 | J | N | MS | 1,700 | |
| | 7440-38-2 | Arsenic | 13.3 | | E | MS | T on | |
| | 7440-39-3 | Barium | 123. | | * | MS | 1.7 05 11 | |
| | 7440-41-7 | Beryllium | 0.66 | J | E | MS | 7点、870~ | |
| | 7440-43-9 | Cadmium | 0.78 | J | *NE | MS | 0.870 | |
| | 7440~70-2 | Calcium | | i | | | 1 | |
| | 7440-47-3 | Chromium | 4.7 | | * | MS | I-16 | |
| | 7440-48-4 | Cobalt | 5.4 | | E | MS | 于州台 | |
| | 7440-50-8 | Copper | 91.4 | | NE | MS | 了 难 | |
| | 7439-89-6 | Iron | | | | | 1 | |
| | 7439-92-1 | Lead | 366. | | | MS | | |
| | 7439-95-4 | Magnesium | | | | | 1 | |
| | 7439-96-5 | Manganese | 1440 | , | D* | MS | J 45 15 A | |
| | 7439-97-6 | Mercury | | | · | | J 7 7 134 | |
| | 7440-02-0 | Nickel | 3.9 | | E | MS | T | |
| ! | 7440-09-7 | Potassium | | | | 1 |] ``` | |
| | 7782-49-2 | Selenium | 0.51 | J | N | MS | 4.3 U 34 | |
| | 7440-22-4 | Silver | 1.2 | | N | MS | 17+ | |
| | 7440-23-5 | Sodium | | | | 1 |] ~ | |
| | 7440-28-0 | Thallium | 0.31 | J | | MS | 10.870 | |
| | 7440-62-2 | Vanadium | 25.8 | | * | MS | 0.870 | |
| | 7440-66-6 | Zinc | 241. | | *E | MS | J 761 | |
| | 57-12-5 | Cyanide | | | | |] 4 | |
| | | | | | | |] [| |
| | | | | | | |] | |
| lor Be | fore: BROWN | Clarit | y Before: | | Texture: M | EDIUM | | |
| | | | y After: CLEAR | | | | | |
| | | | | | | | | |
| mments: | : | | | | | | | |
| E: The | reported va | alue is estim | ated due to the | pres | ence of inter | feren | ice. | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| MH3 | Ę | U | 1 | |
|-----|---|---|----|--|
| LIL | J | Е | т. | |

| Lab Name | : ALS Labora | atory Group | Contract: | EPW09 | 9036 | | | |
|------------|--------------|-----------------------|-----------------|---|---------------------------------------|-------------|------------|----------------|
| Lab Code | : DATAC C | Case No.: <u>4075</u> | Mod. Ref. | No.: | SDG 1 | No.: M | H35E5 | |
| Matrix: | Soil | | Lab Sample | e ID: | 1030768007 | | | _ |
| % Solids | : 64.0 | | Date Recei | Lved: | 11/03/2010 | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt):n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 5900 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | I | |
| : | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | <u> </u> | | | | |
| | 7440-70-2 | Calcium | 934. | | | P | | |
| • | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | 1 | | 1. | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 71700 | | D | Р | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 2440 | | | P | _ | |
| • | 7439-96-5 | Manganese | • • | | | 1 | ` | • |
| | 7439-97-6 | Mercury | | 1 | | | | |
| - | 7440-02-0 | Nickel | | | | | | ~1" |
| 37. | 7440-09-7 | Potassium | 1300 | Ì | E | P | T+ | 12 |
| : | 7782-49-2 | Selenium | | | | | ~ | 7- |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 88.1 | J | E | P | 781 | UIN |
| <i>;</i> ' | 7440-28-0 | Thallium | | | | 1. | , – | 12 U 30 2/18/1 |
| • • | 7440-62-2 | Vanadium | | | | | | 1100 |
| | 7440-66-6 | Zinc | | | | | | |
| · · · | 57-12-5 | Cyanide | | T | | | | |
| - | | | | | | | | |
| ~ 7 | | | | | | | | |
| ٠,.٠ | | | | d-10-10-10-10-10-10-10-10-10-10-10-10-10- | · · · · · · · · · · · · · · · · · · · | | | |
| Color Bet | fore: BROWN | Clarit | y Before: | | Texture: ME | EDIUM | | |
| Color Aft | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | | <u>-</u> |
| Comments: | | | | | | | | |
| | | _1 | | | | 6 | | |
| F: Tue | reborred A | alue is estima | ated due to the | pres | ence of inter | rerend | <u>.e.</u> | _ |
| | | | | | | | | |
| | | | | | | | | _ |

EPA SAMPLE NO.

MH35F1

| | | _ | | | | | | |
|-------------|--------------|-----------------------|-----------------------|--------------------|---------------|--|--------|----------|
| Name | : ALS Labor | atory Group | Contract: | Contract: EPW09036 | | | | |
| Code | : DATAC | Case No.: <u>4075</u> | 5 Mod. Ref. | No.: _ | SDG I | No.: I | мн35Е5 | <u> </u> |
| rix: | Soil | | Lab Sample | ID: | 1030768007 | | | |
| olids | : 64.0 | | Date Recei | ved: | 11/03/2010 | | | |
| | | | | _ | | | | |
| centr | ation Units | (ug/L, ug or | mg/kg dry weigh | it): ma | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | | | | ì | 1 | |
| | 7440-36-0 | Antimony | 1.1 | J | N | MS | 1.6 | UST |
| | 7440-38-2 | Arsenic | 41.7 | | E | MS | 1 = | Th |
| | 7440-39-3 | Barium | 424. | | * | MS | 13 | 79 |
| | 7440-41-7 | Beryllium | 0.39 | J | E | MS | 0.78 | 3 U 🤊 |
| | 7440-43-9 | Cadmium | 0.83 | | *NE | MS | 1 | 21 |
| | 7440-70-2 | Calcium | | | | | 1 - | |
| | 7440-47-3 | Chromium | 5.2 | | * | MS | 1 | |
| | 7440-48-4 | Cobalt | 3.8 | | E | MS | 17 | M |
| | 7440-50-8 | Copper | 42.7 | | NE | MS | 17 | 16 |
| | 7439-89-6 | Iron | | | | 1 | ~ | |
| | 7439-92-1 | Lead | 394. | | | MS | 1 | |
| | 7439-95-4 | Magnesium | 331. | | | 1 | ┧. | |
| - | 7439-96-5 | Manganese | 421. | | * | MS | 1 - | -16-PG |
| | 7439-97-6 | Mercury | | | · · · · · · | 1 | ~ | |
| | 7440-02-0 | Nickel | 3.1 | - | E | MS | 1π | K |
| | 7440-09-7 | Potassium | | 1 | - | | 1 ~ | |
| | 7782-49-2 | Selenium | 1.5 | J | N | MS | 3.9 | W W |
| | 7440-22-4 | Silver | 2.4 | | N | MS | 171 | m |
| | 7440-23-5 | Sodium | | | | 1 | ~ | |
| | 7440-28-0 | Thallium | 0.62 | J | | MS | カラ | 80 |
| | 7440-62-2 | Vanadium | 40.7 | | * | MS | 12/ | 21 |
| | 7440-66-6 | Zinc | 197. | - | *E | MS | + | n 3 |
| | 57-12-5 | Cyanide | | <u> </u> | | | " | 2/10 |
| | | 1074444 | | | - , | | 1 | 7101 |
| | | | | | - ; | | 1 | |
| | | <u> </u> | | | | l | J | |
| r Be | fore: ORANGE | Clarit | y Before: | | Texture :: MI | EDIUM | | |
| r Af | ter: BROWN | Clarit | y After: <u>CLEAR</u> | | _ Artifacts: | | | |
| | _ | | | | | | | |
| ents | | | | | | _ | | |
| : The | reported v | alue is estima | ated due to the | prese | nce of inter | teren | ce. | |
| | | | | | | | | |
| | | | | | | | | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. MH35F2

| | | | | | | | | |
|----------|------------------|---------------|------------------|---|---|-------|-------------|-------------|
| Lab Nam | ne: ALS Labor | atory Group | Contract: | EPWO9 | 9036 | | | |
| Lab Cod | de: <u>DATAC</u> | Case No.: 407 | 55 Mod. Ref. | Mod. Ref. No.: SDG No.: MH35E5 | | | | |
| Matrix: | Soil | | Lab Sample | ID: | 1030768008 | | | |
| % Solid | ls: 74.0 | | Date Recei | ved: | 11/03/2010 | | | |
| | | | 5440 110001 | ·cu. | 117 037 2010 | | | |
| Concent | ration Units | ug/L, ug or | mg/kg dry weigh | t): n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | 7040 | | | P | 1 | |
| | 7440-36-0 | Antimony | | | | | 1 | |
| | 7440-38-2 | Arsenic | | | | | 1 | |
| | 7440-39-3 | Barium | | *************************************** | | | 1 | |
| | 7440-41-7 | Beryllium | | | | | ĺ | |
| | 7440-43-9 | Cadmium | | | | | Ì | |
| | 7440-70-2 | Calcium | 1040 | | | Р | 1 | |
| | 7440-47-3 | Chromium | | | | | 1 | |
| | 7440-48-4 | Cobalt | | | | | 1 | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 62200 | | D | P |] | |
| | 7439-92-1 | Lead | | | | | 1 | |
| | 7439-95-4 | Magnesium | 3760 | | : | P | | |
| , | 7439-96-5 | Manganese | | | , | | [- | |
| | 7439-97-6 | Mercury | | | | ` | | |
| | 7440-02-0 | Nickel | | | | | | M |
| | 7440-09-7 | Potassium | 1090 | | E | P | J+ | 1/2 |
| | 7782-49-2 | Selenium | | | * ****** | | | N V 9 2/18/ |
| | 7440-22-4 | Silver | | | | | | - |
| | 7440-23-5 | Sodium | 75.6 | J | E | P | 676 | U |
| | 7440-28-0 | Thallium | | | | | | اه.ام |
| | 7440-62-2 | Vanadium | | | | | | A 101 |
| | 7440-66-6 | Zinc | | | - - | | | |
| • | 57-12-5 | Cyanide | | | , , , , , , , , , , , , , , , , , , , | | | |
| | , i | | | | | | | |
| | | | | | • | | | |
| | | | | , | | • | ı | |
| Color Be | efore: BROWN | Clari | ty Before: | | Texture: M | EDIUM | | |
| Color A | fter: YELLOW | Clari | ty After: CLEAR | | Artifacts: | | | |
| Comments | e • | | | | | | | |
| | | oluo io ooti- | .a+ad dua +a +1 | | ongo of int | .£a | | |
| E: IN | re reported A | alue is estim | nated due to the | bres | ence of inter | reren | ce. | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

٠.. · 37

EPA SAMPLE NO.

| MH35F2 | |
|---------|--|
| LIUODES | |

| Matrix: Soil Lab Sample ID: 1030768008 \$ Solids: 74.0 Date Received: 11/03/2010 Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg CAS No. | |
|--|----------------|
| Matrix: Soil Lab Sample ID: 1030768008 \$ Solids: 74.0 Date Received: 11/03/2010 Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg CAS No. | |
| Concentration Units (ug/L, ug or mg/kg dry weight): mg/kg CAS No. | 5 |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 7440-36-0 Antimony 0.56 J N MS 7440-39-3 Barium 342. * MS 7440-41-7 Beryllium 0.38 J E MS 7440-41-7 Beryllium 0.38 J E MS 7440-41-7 Colcium 7440-41-7 Colcium 7440-40-8 Colcium 7440-40-9 Gadnium 5.7 * MS 7440-48-4 Cobalt 4.8 E MS 7440-48-4 Cobalt 4.8 E MS 7439-95-4 Magnesium 7439-95-4 Magnesium 7439-96-5 Manganese 580. * MS 7439-97-6 Mercury 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium 7782-49-2 Selenium 1.0 J N MS 7440-28-0 Thallium 0.41 J MS 7440-28-0 Thallium 0.41 J MS 7440-66-6 Zinc 360. *E MS 7440-66-6 Zinc 360. *E MS 7440-66-6 Zinc 360. *E MS 757-12-5 Cyanide | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 0.56 J N MS 7440-36-0 Antimony 0.56 J N MS 7440-38-2 Arsenic 35.3 E MS J 7440-41-7 Beryllium 0.38 J E MS O.6 7440-41-7 Beryllium 0.38 J E MS O.6 T 7440-40-3-9 Cadmium 1.4 *NE MS MS O.6 T 7440-70-2 Calcium 5.7 * MS T MS T T MS T 7440-48-4 Cobalt 4.8 E MS J T MS T T | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 0.56 J N MS 7440-36-0 Antimony 0.56 J N MS 7440-38-2 Arsenic 35.3 E MS J 7440-39-3 Barium 342. * MS J 7440-41-7 Beryllium 0.38 J E MS J 7440-70-2 Calcium 1.4 *NE MS J F MS J < | |
| 7429-90-5 Aluminum 1.4 7440-36-0 Antimony 0.56 J N MS I.4 7440-38-2 Arsenic 35.3 E MS J E MS J T MS J E MS J I MS J J | |
| 7440-36-0 Antimony 0.56 J N MS 1,4 7440-38-2 Arsenic 35.3 E MS J T MS J T MS J T MS J E MS J E MS J E MS J E MS J Co.6 J NE MS J E MS J E MS J Co.6 NE MS J Co.6 J NE MS J Co.6 J NE MS J Co.6 J NE MS J Co.6 L A NE MS J Co.6 L A NE D J NE D J N MS J J A J J J J J J J J J J J J J J J J J J J | |
| 7440-36-0 Antimony 0.56 J N MS 1,4 7440-38-2 Arsenic 35.3 E MS J T MS J T MS J T MS J E MS J T A MS J T A MS J J A MS J J A J J J MS <td< td=""><td>1.1</td></td<> | 1.1 |
| 7440-41-7 Beryllium 0.38 J E MS 0.6 7440-43-9 Cadmium 1.4 *NE MS J *NE MS | UJAZ |
| 7440-41-7 Beryllium 0.38 J E MS 0.6 7440-43-9 Cadmium 1.4 *NE MS J *NE MS | 11 |
| 7440-41-7 Beryllium 0.38 J E MS 0.6 7440-43-9 Cadmium 1.4 *NE MS T 7440-70-2 Calcium *NE MS T 7440-47-3 Chromium 5.7 * MS E 7440-48-4 Cobalt 4.8 E MS 7440-50-8 Copper 98.6 NE MS 7439-89-6 Iron Iron Iron MS 7439-92-1 Lead 306. MS 7439-95-4 Magnesium * MS 7439-96-5 Manganese 580. * MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium 1.0 J N MS 7440-22-4 Silver 1.4 N MS J 7440-23-5 Sodium Sodium * MS J 7440-62-2 Vanadium 42.3 * MS J< | W. |
| T440-43-9 Cadmium | 8 U 7 |
| 7440-70-2 Calcium 7440-47-3 Chromium 5.7 * MS 7440-48-4 Cobalt 4.8 E MS 7440-50-8 Copper 98.6 NE MS 7439-89-6 Iron T 7439-92-1 Lead 306. MS 7439-95-4 Magnesium MS 7439-96-5 Manganese 580. * MS 7440-02-0 Nickel 3.4 E MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium 1.0 J N MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS | 7 |
| 7440-47-3 Chromium 5.7 * MS 7440-48-4 Cobalt 4.8 E MS T 7440-50-8 Copper 98.6 NE MS T 7439-89-6 Iron Iron Iron MS T 7439-92-1 Lead 306. MS MS T 7439-95-4 Magnesium Iron Iron | - N |
| 7439-89-6 Iron 7439-92-1 Lead 306. MS 7439-95-4 Magnesium * MS 7439-96-5 Manganese 580. * MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium . . . 7782-49-2 Selenium 1.0 J N MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium . . . 7440-28-0 Thallium 0.41 J MS . 7440-66-6 Zinc 360. *E MS . 57-12-5 Cyanide | |
| 7439-89-6 Iron 7439-92-1 Lead 306. MS 7439-95-4 Magnesium * MS 7439-96-5 Manganese 580. * MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium . . . 7782-49-2 Selenium 1.0 J N MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium . . 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide . * | M |
| 7439-89-6 Iron 7439-92-1 Lead 306. MS 7439-95-4 Magnesium * MS 7439-97-6 Mercury * MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium . . 7782-49-2 Selenium 1.0 J N MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium . . . 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide . . | 1 |
| 7439-92-1 Lead 306. MS 7439-95-4 Magnesium * MS 7439-96-5 Manganese 580. * MS 7439-97-6 Mercury * MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium * MS * MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium * MS * MS 7440-28-0 Thallium 0.41 J MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide **E MS | |
| 7439-95-4 Magnesium 7439-96-5 Manganese 580. * MS 7439-97-6 Mercury * MS 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium | |
| 7439-96-5 Manganese 580. * MS 7439-97-6 Mercury 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium 782-49-2 Selenium 1.0 J N MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium MS 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | , |
| 7439-97-6 Mercury 7440-02-0 Nickel 3.4 E MS 7440-09-7 Potassium 7782-49-2 Selenium 1.0 J N MS 7440-22-4 Silver 1.4 N MS 7440-23-5 Sodium MS 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | 731 |
| 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | |
| 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | N |
| 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | _ |
| 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | 4 M |
| 7440-28-0 Thallium 0.41 J MS 7440-62-2 Vanadium 42.3 * MS 7440-66-6 Zinc 360. *E MS 57-12-5 Cyanide | + K |
| | |
| | 58 U |
| | |
| | M |
| | 2/18 |
| Lor Before: BROWN Clarity Before: Texture: MEDIUM | 1. |
| lor Before: BROWN Clarity Before: Texture: MEDIUM | |
| | |
| lor After: COLORLESS Clarity After: CLEAR Artifacts: | |
| mments: | |
| E: The reported value is estimated due to the presence of interference. | |

٠.:

| MH35F3 | |
|--------|--|
| | |

| Code: I | DATAC (| Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35E5 | | | | |
|----------|--------------|--------------------|---------------------------------------|--------------------------------|---------------------------------------|---------------|------------------------|--|
| rix: S | Soil | | Lab Sample | D: | 1030768009 | | | |
| olids: 6 | 60.8 | | Date Recei | .ved: | 11/03/2010 | | | |
| | | | | | | | | |
| centrat. | ion Units | (ug/L, ug or | mg/kg dry weigh | nt): 1 | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| 74 | 129-90-5 | Aluminum | 4890 | | <u> </u> | P | - | |
| 74 | 140-36-0 | Antimony | | <u> </u> | | | 1 | |
| 74 | 140-38-2 | Arsenic | · · · · · · · · · · · · · · · · · · · | 1 | <u> </u> | | 1 | |
| 74 | 140-39-3 | Barium | ***** | | | 1 | - | |
| <u> </u> | 140-41-7 | Beryllium | · · · · · · · · · · · · · · · · · · · | | | | 1 | |
| 1 | 40~43-9 | Cadmium | | | | + | † | |
| | 40-70-2 | Calcium | 791. | | | P | 822 U | |
| 74 | 40-47-3 | Chromium | | | 1 | + | | |
| 74 | 40-48-4 | Cobalt | ····· | | | | 1 | |
| 74 | 40-50-8 | Copper | | <u> </u> | | | † | |
| | 39-89-6 | Iron | 88900 | | D | P | 1 | |
| | 39-92-1 | Lead | | | | - | 1 | |
| 74 | 39-95-4 | Magnesium | 2180 | | | P | 1 | |
| | 39-96-5 | Manganese | | <u> </u> | | + | 1 | |
| | 39-97-6 | Mercury | | | | | 1 | |
| F | 40-02-0 | Nickel | 794.0 | | | 1 | 1 | |
| | 40-09-7 | Potassium | 1200 | | E | P | 5+ 76 822 U 2/18 | |
| | 82-49-2 | Selenium | | ···· | | +- | 1 -3 ' | |
| | 40-22-4 | Silver | | | | 1 | | |
| | 40-23-5 | Sodium | 76.1 | J | E | P | 812 () | |
| · | 40-28-0 | Thallium | 7011 | · | | + | 022 | |
| | 40-62-2 | Vanadium | | | · · · · · · · · · · · · · · · · · · · | + | 2/18 | |
| | 40-66-6 | Zinc | | · - | | | | |
| · | -12-5 | Cyanide | | | F/-W-1 | + | 1 | |
| • | | o _j ama | | | | + | 1 | |
| | | | | , , | <u></u> | | 1 | |
| <u> </u> | . | <u>i,1</u> | | | | | j | |
| or Befor | e: BROWN | Clarit | y Before: | • 31 | Texture: M | EDIUM | | |
| or After | · YELLOW | Clarit | y After: CLEAR | | | | | |
| | 12220 | | y micci. ommin. | | ALCILACES. | | | |
| ments: | | | | | | | | |
| | eported va | alue is estima | ated due to the | pres | ence of inter | feren | ce. | |
| | | | | 2-00 | | | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

| | | | | EFA | SAMP | TE NO. | |
|---------------------|-----------------|-----------------|-----------------------------|----------------|----------|------------------|--|
| | | | | | MH35 | F3 | |
| ab Name: ALS Labo | ratory Group | Contract: | EPW09 | 9036 | | | |
| ab Code: DATAC | Case No.: 4075 | 5 Mod. Ref. | Mod. Ref. No.: SDG No.: MH3 | | | | |
| atrix: <u>Soil</u> | | Lab Sample | ID: | 1030768009 | | | |
| Solids: <u>60.8</u> | | Date Recei | ved: | 11/03/2010 | | | |
| oncentration Unit | s (ug/L, ug or | ma/ka drv weiah | ıt): m | na/ka | | | |
| CAS No. | Analyte | Concentration | С | Ω | М | 7 | |
| 7429-90-5 | Aluminum | | | | "" | - | |
| 7440-36-0 | Antimony | 0.87 | J | N | MS | 1, 1, 11 | |
| 7440-38-2 | Arsenic | 57.0 | J. | E E | MS | 1.6 UT 0.82 U | |
| 7440-39-3 | Barium | 317. | | * | MS | 7 2 | |
| 7440-41-7 | Beryllium | 0.41 | J | E | MS | 2 001 | |
| 7440-43-9 | Cadmium | 0.52 | J | *NE | MS | 0.820 | |
| 7440-70-2 | Calcium | 0.52 | J | | MS | OIDX U | |
| 7440-47-3 | Chromium | 4.8 | | * | MC | J M | |
| 7440-48-4 | Cobalt | 3.6 | | E | MS MS | 7 1/ | |
| 7440-50-8 | Copper | 41.8 | | NE | MS | JA | |
| 7439-89-6 | Iron | 41.0 | | NE | C.P.I | 1 / | |
| 7439-92-1 | Lead | 541. | | | MS | - | |
| 7439-95-4 | Magnesium | | | | 193 | , | |
| 7439-96-5 | Manganese | 436. | · | * | MS | + 25 | |
| 7439-97-6 | Mercury | 100. | | | HD | 31 | |
| 7440-02-0 | Nickel | 3.2 | | E | MS | + W | |
| 7440-09-7 | Potassium | J.2 | | 155 | HD | ٦ . | |
| 7782-49-2 | Selenium | 1.4 | J | N | MS | 4.1-0 | |
| 7440-22-4 | Silver | 2.1 | | N | MS | | |
| 7440-23-5 | Sodium | 2.1. | | | HS | 71 | |
| 7440-28-0 | Thallium | 0.75 | J | | MS | 0.82 U | |
| 7440-62-2 | Vanadium | 48.6 | | * | MS | T | |
| 7440-66-6 | Zinc | 153. | | *E | MS | + m | |
| 57-12-5 | Cyanide | | | 13 | 1710 | a/1 | |
| | 1-1 | | | | | 91 | |
| | | | | | | | |
| olor Before: ORANG | E Clarit | Z Before: | | Texture: ME | יחדודתי | I | |
| TOT DOTOTE. OWING | n Crarre | A perore: | | Texture: WE | TUTUM | | |
| olor After: COLORL | ESS Clarity | After: CLEAR | | Artifacts: | | | |
| | | · | | | | | |
| omments: | | | | | | | |
| E: The reported | value is estima | ted due to the | nres | ence of interf | Faren | CO | |

| olor | Aft | er: COLOR | LESS | _ | Clarity Af | ter: | CLE | AR | A: | rti | facts: |
|------|------|-----------|-------|----|------------|------|------|----|----------|-----|---------------|
| omme | nts: | | | | | | | | | | |
| E: | The | reported | value | is | estimated | due | to t | he | presence | of | interference. |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35F4 | |

| Code | E: DATAC C | Case No.: 4075 | Mod. Kei. | No.: | SDG | No.: M | інзькь | |
|--------|----------------|----------------|-----------------|-------|--------------|--------|--------|----|
| rix: | Soil | | Lab Sample | ID: | 1030768010 | | | |
| Solids | 3: <u>70.0</u> | | Date Recei | ved: | 11/03/2010 | | | |
| ıcentr | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt):n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 5540 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | 1 | | |
| | 7440-39-3 | Barium | | | İ | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 735. | | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | _ | | | | | |
| | 7440-50-8 | Copper | , ** | | | | | |
| | 7439-89-6 | Iron | 56500 | | | P | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 2810 | | | P | | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | N |
| | 7440-09-7 | Potassium | 1270 | | E | Р | J+ 714 | 7- |
| | 7782-49-2 | Selenium | | | | | _ | |
| | 7440-22-4 | Silver | · | | | | | |
| | 7440-23-5 | Sodium | 68.7 | Ĵ | E | Р | 714 | υ |
| | 7440-28-0 | Thallium | | | | | • | 1 |
| | 7440-62-2 | Vanadium | ÷ . | | | | | 74 |
| | 7440-66-6 | Zinc | | | | | | • |
| | 57-12-5 | Cyanide | , | | 1 | | | |
| | | | _ | | | | | |
| | | | ., . | | | | | |
| or Be | fore: BROWN | Clarit | y Before: | | Texture: N | ÆDIUM | | |
| | ter: YELLOW | | y After: CLEAR | · | - | | | |
| | | | <u> </u> | | | - | | |
| ments | : | | | | | | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO.

| ~ | |
|--------|--|
| | |
| MH35F4 | |

| Lab Name | : ALS Labora | atory Group | Contract: | EPW09 | 0036 | | | |
|----------|--------------|-----------------------|-----------------|-------|------------|---------------|----------|--------------|
| Lab Code | : DATAC C | Case No.: <u>4075</u> | Mod. Ref. | No.: | SDG N | lo.: <u>I</u> | ин35Е5 | |
| Matrix: | Soil | | Lab Sample | ID: | 1030768010 | | | |
| % Solids | : 70.0 | · | Date Recei | ved: | 11/03/2010 | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): n | ng/kg | | - | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | <u> </u> | 1 | An |
| | 7440-36-0 | Antimony | 0.88 | J | N | MS | 1.40 | NE WILL |
| | 7440-38-2 | Arsenic | 34.0 | | E | MS | 1 🛨 | M |
| | 7440~39~3 | Barium | 422. | | * | MS | τĺ | The su |
| | 7440-41-7 | Beryllium | 0.38 | J | E | MS | 0.71 | UM |
| | 7440-43-9 | Cadmium | 0.47 | J | *NE | MS | 1 ~ 7: | 11 7/2 |
| | 7440-70-2 | Calcium | | | | | | M HoA 3/9/11 |
| | 7440-47-3 | Chromium | 5.9 | | * | MS | I | 3/9/11 |
| | 7440-48-4 | Cobalt | 3.1 | | E | MS | Ī | H |
| | 7440-50-8 | Copper | 29.8 | | NE | MS | 1 | K |
| | 7439-89-6 | Iron | | | • | | ì | |
| | 7439-92-1 | Lead | 361. | | | MS | | |
| | 7439-95-4 | Magnesium | | | | |] | w. H. A. |
| | 7439-96-5 | Manganese | 311. | | * | MS | 3 | 3/9/11 |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | 2.8 | | E | MS | T | The |
| | 7440-09-7 | Potassium | - | | | |] _ | -11 -M |
| | 7782-49-2 | Selenium | 1.3 | J | N | MS | 3,6 | M J M |
| | 7440-22-4 | Silver | 1.9 | | И | MS | 17+ | W |
| | | | | | | | | |

Color Before: ORANGE Clarity Before: Texture: MEDIUM Color After: COLORLESS Clarity After: CLEAR Artifacts: Comments: E: The reported value is estimated due to the presence of interference.

0.69

34.6

136.

*E

MS

J

7440-23-5

7440-28-0

7440-62-2

7440-66-6

57-12-5

Sodium

Zinc

Thallium

Vanadium

Cyanide

| | |
|--------|--|
| MH35F5 | |

| Lab Code | e: DATAC C | Case No.: 4075 | Mod. Ref. | No.: _ | SDG | No.: 1 | 4H35E5 |
|----------|----------------|----------------|-----------------------|---------------|-------------|-----------|--------------------|
| Matrix: | Soil | | Lab Sample | ID: <u>1</u> | 030768011 | | |
| % Solids | s: <u>77.7</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| Concenti | ration Units | (ug/L, ug or | mg/kg dry weigh | it): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 5240 | | - | P | 1 |
| | 7440-36-0 | Antimony | | | | |] |
| | 7440-38-2 | Arsenic | | i | | |] |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | |] |
| | 7440-43-9 | Cadmium | | | | | 12 |
| | 7440-70-2 | Calcium | 230. | J | | P | 644 U 72 |
| | 7440-47-3 | Chromium | | | | |] |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 44400 | | | P | |
| _ | 7439-92-1 | Lead | | | | | 1 |
| | 7439-95-4 | Magnesium | . 2570 | | | P | |
| | 7439-96-5 | Manganese | | | | |] |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | Th |
| | 7440-09-7 | Potassium | 1230 | | E | P | 17+ , |
| | 7782-49-2 | Selenium | | | 444. | | |
| | 7440-22-4 | Silver | | | | | 1, 11 |
| | 7440-23-5 | Sodium | 69.8 | J | E | P | 16440 |
| | 7440-28-0 | Thallium : | | | | | J+ 74 0 21 2/18/11 |
| | 7440-62-2 | Vanadium . | | | | | 7/10/11 |
| | 7440-66-6 | Zinc | | | | _ <u></u> |] |
| | 57-12-5 | Cyanide . | | | | | |
| | | | | | | | <u> </u> - |
| | | | | | | <u> </u> | J |
| Color Be | efore: BROWN | Clarit | y Before: | | Texture: | MEDIUM | |
| Color Af | ter: YELLOW | Clarit | y After: <u>CLEAR</u> | | _ Artifacts | : | |
| Comments | 3 : | | | | | | |
| D . Mb. | o reported | raluo is ostim | ated due to the | presei | nce of inte | rferen | ce |

| MU 3 5 5 5 | |
|------------|--|
| | |

| | | | | | <u> </u> | | |
|----------|----------------|---------------------------------------|-----------------|--|---------------|---------------|--------------|
| ab Name | e: ALS Labora | atory Group | Contract: | EPW09 | 036 | | |
| ab Code | e: DATAC (| Case No.: 4075 | 5 Mod. Ref. | No.: _ | SDG 1 | 10.: <u>1</u> | MH35E5 |
| Matrix: | Soil | | Lab Sample | ID: | 1030768011 | | |
| Solids | s: <u>77.7</u> | | Date Recei | ved: | 11/03/2010 | | |
| | | | | | | | |
| Concentr | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mç | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | | | | + | - |
| | 7440-36-0 | Antimony | 1.2 | J | N | MS | 1,3 05 P |
| | 7440-38-2 | Arsenic | 54.8 | <u> </u> | E | MS | T |
| | 7440-39-3 | Barium | 582. | | * | MS | + + |
| | 7440-41-7 | Beryllium | 0.41 | J | E | MS | 5/11/19 |
| | 7440-43-9 | Cadmium | 2.6 | | *NE | MS | T 7/ |
| | 7440-70-2 | Calcium | 2.0 | | | + | 1 7 " |
| | 7440-47-3 | Chromium | 4.5 | | * | MS | J-A |
| | 7440~48-4 | Cobalt | 4.0 | | E | MS | サイス |
| | 7440-50-8 | Copper | 40.4 | | NE | MS | ーカル |
| | 7439-89-6 | Iron | 10.1 | | IVE | HS | 1 4 |
| | 7439-92-1 | Lead | 598. | | ~ | MS | 1 |
| , | 7439-95-4 | Magnesium. | 330. | | | 140 | 1 , |
| - | 7439-96-5 | Manganese | 304. | | * | MS | 10/3 |
| | 7439-97-6 | Mercury | 304. | - | | Mo | 3/1 |
| | 7440-02-0 | Nickel | 3.3 | | E | MS | - 7 |
| | 7440-09-7 | Potassium | 3.3 | | E . | I MS | 1 7 " |
| | 7782-49-2 | Selenium | 2.0 | J | \7 | MS | 22 134 |
| | 7440-22-4 | Silver | 3.6 | | N | | 3.2 UN |
| | 7440-23-5 | Sodium | 3.0 | | N | MS | 74 " |
| | 7440-23-3 | Thallium | 0.59 | <u> </u> | | | 011119 |
| | 7440-28-0 | Vanadium | 36.4 | J | * | MS | 0.640 |
| | 7440-62-2 | Zinc | | | | MS | = 11 |
| | 57-12-5 | | 604. | | *E | MS | ١, ١ |
| | 37-12-3 | Cyanide | | | | | 18/18 |
| | | · · · · · · · · · · · · · · · · · · · | ······• | | | | ' ' |
| | L | <u> </u> | ··········· | | | | j |
| olor Be | fore: BROWN | ·Clarity | y Before: | | Texture: ME | DIUM | |
| olor Af | ter: WHITE | | / After: CLEAR | | | | |
| | | | <u> </u> | | | | |
| omments | : | | | | | | |
| E: The | reported v | alue is estima | ted due to the | prese | nce of interf | feren | ce. |
| | | | | | | | |
| E: The | e reported v | alue is estima | ted due to the | prese | nce of interf | Teren | ce. |

| EPA | SAMPLE | NO. | |
|---------|--------|-----|--|
| | MH35F6 | | |

| | | | | | | | 10020 | |
|----------------|---|--------------------------|--|----------|-----------|--|--------------------------------------|-------------|
| Lab Name | : ALS Labor | atory Group | Contract: | EPW0 | 9036 | | | |
| Lab Code | : DATAC | Case No.: 40755 | Mod. Ref. | No.: | | SDG No. | : MH35E | 5 |
| Matrix: | Soil | | Lab Sample | ID: | 10307680 | 12 | | |
| % Solids | : 67.5 | | Date Recei | .ved: | 11/03/20 | 10 | | |
| | *************************************** | | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt):n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | 0 | | м | |
| | 7429-90-5 | Aluminum | 8220 | | | | P | |
| | 7440-36-0 | Antimony | — | <u> </u> | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | ·····! | | | | | |
| | 7440-41-7 | Beryllium | , ***** <u>*******************************</u> | | | | * | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1040 | | · | | P | |
| | 7440-47-3 | Chromium | ***** | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 94600 | | D | | P | |
| | 7439-92-1 | Lead | | | | | | |
| · | 7439-95-4 | Magnesium | 4550 | | | <u>", </u> | P | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | TO THE | | | | | |
| | 7440-02-0 | Nickel | | | | | _ | . 4. |
| | 7440-09-7 | Potassium | 1060 | | E | | $\mathbf{P} = \mathbf{J} \mathbf{T}$ | l m |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 80.6 | J | E | | P 74 | 10 % |
| | 7440-28-0 | Thallium | | | | | | 10 2 2/18/ |
| | 7440-62-2 | Vanadium | | | | | | 1101 |
| | 7440-66-6 57-12-5 | Zinc | | | ** | | | |
| | 31-12-3 | Cyanide | | | | | _ | |
| | · · · · · · · · · · · · · · · · · · · | | **** | | | | | |
| l | 10°-10 | | | | | | | |
| Color Be | fore: BROWN | ∵i Clarity | Before: | | Textu | re: MEDI | TIM | |
| | - | | | | | 111111 | 011 | |
| Color Aft | er: YELLOW | Clarity | After: CLEAR | | Artifa | acts: | | |
| 7 - | | | | | | | | |
| Comments: | | T | , | | _ | | | |
| 上: The | reported v | alue is estima | ted due to the | pres | ence of : | interfer | ence. | |
| | | | | | | | | |
| | | | | | | | | |
| *** | | | | | | | | |

EPA SAMPLE NO.

MH35F6

| o Cod | e: DATAC | Case No.: 407 | 55 Mod. Ref. | No.: | SDG | No.: | MH35E5 |
|--------|----------------|----------------|------------------|---------------|-------------|--------|-----------------------|
| atrix: | | | | _ | | | |
| artrx: | Soil | <u></u> | Lab Sample | 1D: T | 030768012 | - | |
| Solid | s: <u>67.5</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| | | | | | | | |
| oncent | ration Units | s (ug/L, ug o | mg/kg dry weigh | it): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | | | | | 1 |
| | 7440-36-0 | Antimony | 0.38 | J | N | MS | 1.51 |
| | 7440-38-2 | Arsenic | 34.3 | | E | MS | 177 |
| | 7440-39-3 | Barium | 121. | | * | MS | 13 |
| | 7440-41-7 | Beryllium | 0.41 | J | E | MS | 1.5 L 0.74 0.74 |
| | 7440-43-9 | Cadmium | 0.51 | J | *NE | MS | 0.74 |
| | 7440-70-2 | Calcium | | · | | | 1 |
| | 7440-47-3 | Chromium | 6.6 | | * | MS | 1+ |
| | 7440-48-4 | . Cobalt | 5.5 | | E | MS | 1 7 1 |
| | 7440-50-8 | Copper | 55.2 | | NE | MS | 17 % |
| | 7439-89-6 | Iron | | | | | 1 ~ |
| | 7439-92-1 - | Lead | 334. | | | MS | 1 |
| | 7439-95-4 | Magnesium | • | | | | |
| | 7439-96-5 | Manganese | 831. | | D* | MS | IN |
| | 7439-97-6 | Mercury | | | | | 1 |
| | 7440-02-0 | Nickel | 3.9 | | E | MS |] 🎞 🏲 |
| | 7440-09-7 | Potassium | | | | |] _ |
| | 7782-49-2 | Selenium | 0.81 | J | N | MS | 3.7 |
| | 7440-22-4 | Silver | 1.4 | | N | MS |].丁+ |
| | 7440-23-5 | Sodium | | | | |] ' |
| | 7440-28-0. | Thallium | 0.44 | J | | MS | 10.74 |
| | 7440-62-2 | Vanadium | 49.9 | | * | MS | J |
| | 7440-66-6 | Zinc | 186. | | *E | MS | 0.74 T |
| | 57-12-5 | Cyanide | | | | | 1 |
| | | | | | | |] |
| | L | | | | | | J |
| or Be | efore: BROWN | Clari | ty Before: | | Texture: 1 | MEDIUM | |
| | | | | | - | | |
| tor A | ter: COLORL | ESS Clari | ty After: CLEAR | | Artifacts | : | |
| nments | s : | | | | | | |
| | | zalno io ootie | mated due to the | neces | on of inte | rfor | 70 |
| n• 111 | e reborred / | varue is estil | mared due to the | Preser | ice or ince | rreren | ce. |

| MH35F7 | |
|--------|--|

| Matrix: | | Case No.: <u>407</u> | | | SDG | | | |
|---------|---|----------------------|-----------------|-------|-------------|-------|---------|--------------------|
| datiix: | 2011 | | rap Sampre | TD: | 1030768013 | | | |
| Solid | s: <u>54.0</u> | | Date Recei | ved: | 11/03/2010 | | | |
| Concent | ration Units | (ug/L, ug or | mg/kg dry weigh | t): r | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 5710 | | | P | | |
| | 7440-36-0 | Antimony | | | | | 1 | |
| | 7440-38-2 | Arsenic | | | | | 1 | |
| | 7440-39-3 | Barium | | | | | 1 | |
| | 7440-41-7 | Beryllium | | | | 1 | 1 | |
| | 7440-43-9 | Cadmium | | | | - | 1 | |
| | 7440-70-2 | Calcium | 1040 | | | P | 1 | |
| | 7440-47-3 | Chromium | | | | | 1 | |
| | 7440-48-4 | Cobalt | | | | | 1 . | |
| | 7440-50-8 | Copper | | | | | 1 | |
| | 7439-89-6 | Iron | 123000 | | D | P | 1 | |
| | 7439-92-1 | Lead | | | | | 1 | |
| | 7439-95-4 | Magnesium | 2360 | | | P | 1 : | |
| , | 7439-96-5 | Manganese | | | | i i | 1 | • |
| | 7439-97-6 | Mercury | | | | 1 | 1 | |
| | 7440-02-0 | Nickel | | | | | | 111- |
| | 7440-09-7 | Potassium | 1410 | | E | P | IJ+ | 7.0 |
| | 7782-49-2 | Selenium | | | | | ''' | |
| | 7440-22-4 | Silver | | | | | 1 | |
| | 7440-23-5 | Sodium | 109. | J | E | P | 1926 | UP |
| | 7440-28-0 | Thallium | | | | | ' ' ' ' | 1101 |
| | 7440-62-2 | Vanadium | | | | | | n U #2 2/18/ |
| | 7440-66-6 | Zinc | | • | | | , | |
| • | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | | <u> </u> | | | |] , _, | |
| olor Be | fore: BROWN | Clari | ty Before: | | Texture: M | EDIUM | | |
| olor Af | ter: YELLOW | Clarit | ty After: CLEAR | | Artifacts: | | | |
| | *************************************** | | | | | | | _ |
| omments | :: | | | | | | | |

| かなけつにかつ | |
|---------|--|
| | |
| | |

| | | | | | | MH35 | F' / | - 1 |
|---------|--|----------------|---------------------------------------|----------------|--------------|-------------|-------|-------------------------|
| ab Name | e: ALS Labora | atory Group | Contract: | EPW0903 | 6 | | | |
| ab Code | e: DATAC | Case No.: 4075 | 5 Mod. Ref. | No.: | SDG | No.: 1 | 4Н35Е | 5 |
| atrix: | Soil | | Lab Sample | ID: <u>10</u> | 30768013 | | | |
| Solids | s: <u>54.0</u> | | Date Recei | ved: <u>11</u> | /03/2010 | | | |
| oncentr | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg/ | kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | · · · · · · · · · · · · · · · · · · · | | | | 1 | |
| | 7440-36-0 | Antimony | 0.58 | J | N | MS | 1.0 | 1577 |
| | 7440-38-2 | Arsenic | 37.2 | | E | MS | 1"+ | U.S |
| | 7440-39-3 | Barium | 258. | | * | MS | 17 | 18 |
| | 7440-41-7 | Beryllium | 0.57 | J | E | MS | 0.9 | 3 U |
| | 7440-43-9 | Cadmium | 0.79 | J | *NE | MS | 09 | 3 U |
| | 7440-70-2 | Calcium | | | ~ | | 00 1 |) D |
| | 7440-47-3 | Chromium | 8.4 | | * | MS | 1- | |
| | 7440-48-4 | Cobalt | 4.4 | | E | MS | 17 | 1 |
| | 7440-50-8 | Copper | 59.7 | | NE | MS | 7 | 74 |
| | 7439-89-6 | Iron | | | | | ~ | |
| | 7439-92-1 | Lead | 417. | | **** | MS | | |
| | 7439-95-4 | Magnesium · | | | | | | |
| · - | 7439-96-5 | Manganese | 636. | | * | MS | + | - 1 |
| | 7439-97-6 | Mercury | | | | 1 | -0 | 3 |
| | 7440-02-0 | Nickel | 3.6 | | E | MS | ~ | 71 - V 81 |
| | 7440-09-7 | Potassium | | | | 1 | -7 | • |
| , | 7782-49-2 | Selenium | 2.1 | J | N | MS | 41 | -+} 87 |
| | 7440-22-4 | Silver | 2.2 | | N | MS | ーナナ | 7 |
| | 7440-23-5 | Sodium | | | | 110 | | |
| | 7440-28-0 | Thallium | 0.99 | | | MS | T+ | 31 |
| | 7440-62-2 | Vanadium | 71.7 | | * | MS | 7 | -37 |
| | 7440-66-6 | Zinc | 225. | | *E | MS | 77 | 2/10 |
| | 57-12-5 | Cyanide | 2201 | | | 110 | > | 0/1 |
| | | ojaniac | - | | | - | | 7 |
| | - · · · · · · · · · · · · · · · · · · · | 1 | | | | 1 . | | |
| lor Be: | fore: ORANGE | Clarity | Before: | • • | Texture: M | EDIUM: | | |
| | | | After: CLEAR | | Artifacts: | | | |
| mments | • | | | | | | | |
| | | . 7. 4 . 4 | | | | _ | | |
| ்: The | reported v | alue is estima | ted due to the | presend | ce of inter | feren | ce. | |

| MEDITO | |
|----------|--|
| אירר חוש | |
| | |

| | | | | | • | | | |
|------------------|-------------|----------------|-----------------|--------|-----------|---------------------------------------|--------------|--------|
| Name | : ALS Labor | atory Group | Contract: | EPW09 | 036 | | | |
| Code | : DATAC | Case No.: 4075 | Mod. Ref. | No.: | | SDG 1 | No.: | MH35E5 |
| rix: | Soil | | Lab Sample | ID: | 10307680 | 14 | | |
| olids | : 40.4 | | Date Recei | ved: | 11/03/20 | 10 | | |
| | | | | | | | | |
| centr | ation Units | (ug/L, ug or | mg/kg dry weigh | it): m | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | *** | М | |
| | 7429-90-5 | Aluminum | 5060 | | | | P | 1 |
| | 7440-36-0 | Antimony | | | | | T - | 1 |
| | 7440-38-2 | Arsenic | | | | | | 1 |
| | 7440-39-3 | Barium | | | | **** | | 1 |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | 1 |
| | 7440-70-2 | Calcium | 4130 | | | | ₽ | 1 |
| - | 7440-47-3 | Chromium | | | | | | 1 |
| | 7440-48-4 | Cobalt | | | | | | † |
| , - | 7440-50-8 | Copper | | i | | | | 1 |
| | 7439-89-6 | Iron | 860000 | | D | | P | 1 |
| | 7439-92-1 | Lead | | | | | | † |
| ·. | 7439-95-4 | Magnesium | 447. | J | | | -: P | 1240 1 |
| • | 7439-96-5 | Manganese | · · | | • • | · · · · · · · · · · · · · · · · · · · | | '- |
| • | 7439-97-6 | Mercury | | | | | | Ī |
| ., | 7440-02-0 | Nickel | | j | | | | |
| 87. | 7440-09-7 | Potassium | 209. | J | E | | Р | 1240 U |
| • | 7782-49-2 | Selenium | | | ···· | | | 1240 U |
| | 7440-22-4 | Silver | | | | | | 1 |
| ٠, | 7440-23-5 | Sodium | 32.3 | J | E | ·· | P | 1240 L |
| | 7440-28-0 | Thallium | | | | | | 1" . |
| - " | 7440-62-2 | Vanadium | | | | | | 1 4 |
| · | 7440-66-6 | Zinc | | | | | | |
| , , _T | 57-12-5 | Cyanide | | | | - | | 1 |
| ^ | | | | | | | Ì | 1 |
| ` ' | | | | | - | | , | 1 |
| ٠, ١ | | | | | | | | , |
| n:Bei | fore: BROWN | Clarity | Before: | | Textu | ce: ME | DIUM | |
| r Aft | er: YELLOW | Clarity | After: CLEAR | | _ Artifa | acts: | | |
| ents: | | | | | | | | |
| | | aluo in osti | +od duo +o +b- | nnoc | anda af i | n+1 | Fax | |
| · rne | reborted A | arue is estima | ted due to the | prese | ence of 1 | interi | eren | .ce. |

EPA SAMPLE NO.

MH35F8

| December Data Dat | |
|--|-------------|
| Date Received: 11/03/2010 CAS No. Analyte Concentration C Q M T429-90-5 Aluminum O.94 J N MS T440-36-0 Antimony O.94 J N MS T440-39-3 Barium 36.3 * MS T440-41-7 Beryllium 10.3 E MS T440-43-9 Cadmium 4.1 *NE MS T440-47-3 Chromium 1.6 J * MS T440-47-3 Chromium 1.6 J * MS T440-47-3 Chromium 1.6 J * MS T440-48-4 Cobalt 17.0 E MS T439-89-6 Iron T439-92-1 Lead 255. MS T439-95-4 Magnesium T439-95-6 Magnese 2410 D* MS T440-09-7 Potassium T682-49-2 Selenium O.21 J N MS T440-09-7 Potassium T782-49-2 Selenium O.21 J N MS T440-23-5 Sodium T440-23-5 Sodium T440-23-5 Sodium T440-23-5 Sodium T440-23-0 Thallium O.26 J MS T440-66-6 Zinc 2470 D*E MS T440-66-6 Zinc Z470 D*E MS T440-66-6 Z470 D*E MS T440-66-6 Z470 D*E MS T440-66-6 Z470 D*E MS T440-66-6 Z470 D*E MS T440-66-6 Z470 D*E MS T440-66-6 | MH35E5 |
| CAS No. Analyte Concentration C Q M | |
| CAS No. Analyte Concentration C Q M | |
| 7429-90-5 Aluminum 0.94 J N MS 7440-38-2 Arsenic 103. E MS 7440-39-3 Barium 36.3 * MS 7440-41-7 Beryllium 10.3 E MS 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium * MS 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7439-89-6 Iron NE MS 7439-92-1 Lead 255. MS 7439-95-4 Magnesium : . 7439-96-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium . . 7482-49-2 Selenium 0.21 J N MS 7440-23-5 Sodium 7440-28-0 Thallium 0.26 J MS | |
| 7429-90-5 Aluminum 0.94 J N MS 7440-38-2 Arsenic 103. E MS 7440-39-3 Barium 36.3 * MS 7440-41-7 Beryllium 10.3 E MS 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium * MS 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7439-89-6 Iron NE MS 7439-92-1 Lead 255. MS 7439-95-4 Magnesium : . 7439-96-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium . . . 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium 7440-28-0 Thallium 0.26 J | |
| 7440-36-0 Antimony 0.94 J N MS 7440-38-2 Arsenic 103. E MS 7440-39-3 Barium 36.3 * MS 7440-41-7 Beryllium 10.3 E MS 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium Calcium * MS 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7439-89-6 Iron Iron NE MS 7439-92-1 Lead 255. MS 7439-95-4 Magnesium . . 7439-96-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium . . . 7440-22-4 Silver 0.22 J N MS 7440-23-5 S | |
| 7440-38-2 Arsenic 103. E MS 7440-39-3 Barium 36.3 * MS 7440-41-7 Beryllium 10.3 E MS 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium Calcium * MS 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7439-89-6 Iron NE MS 7439-92-1 Lead 255. MS 7439-95-4 Magnesium . 7439-96-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium . . . 7440-22-4 Silver 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-28-0 Thallium 0.26 J . MS 7440-66-6 Zinc 2470 D*E <td>]</td> |] |
| 7440-39-3 Barium 36.3 * MS 7440-41-7 Beryllium 10.3 E MS 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium - - MS 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7440-50-8 Copper 110. NE MS 7439-89-6 Iron Iron Iron Iron Iron MS 7439-92-1 Lead 255. MS MS 7439-95-4 Magnesium j MS 7439-97-6 Mercury MS MS 7440-02-0 Nickel 3.3 E MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium - - - MS 744 | 2.5 05 |
| 7440-41-7 Beryllium 10.3 E MS 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium | J 8 |
| 7440-43-9 Cadmium 4.1 *NE MS 7440-70-2 Calcium MS 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7440-50-8 Copper 110. NE MS 7439-89-6 Iron 7439-95-4 Magnesium 7439-95-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-02-0 Nickel 3.3 E MS 7440-2-2 Selenium 0.21 J N MS 7440-2-2-4 Silver 0.22 J N MS 7440-28-0 Thallium 0.26 J MS 7440-66-6 Zinc 2470 D*E MS | I |
| 7440-70-2 Calcium 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7440-50-8 Copper 110. NE MS 7439-89-6 Iron I |]] + = |
| 7440-47-3 Chromium 1.6 J * MS 7440-48-4 Cobalt 17.0 E MS 7440-50-8 Copper 110. NE MS 7439-89-6 Iron . . . 7439-92-1 Lead 255. MS 7439-95-4 Magnesium . . . 7439-96-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium . . . 7440-22-4 Silver 0.21 J N MS 7440-23-5 Sodium 7440-28-0 Thallium 0.26 J . . 7440-62-2 Vanadium 13.4 * . . 7440-66-6 Zinc 2470 D*E MS | JJ 🦈 |
| 7440-48-4 Cobalt 17.0 E MS 7440-50-8 Copper 110. NE MS 7439-89-6 Iron |] |
| 7440-50-8 Copper 110. NE MS 7439-89-6 Iron 7439-92-1 Lead 255. MS 7439-95-4 Magnesium 7439-96-5 Manganese 2410 D* MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium MS 7440-22-4 Silver 0.21 J N MS 7440-23-5 Sodium MS 7440-62-2 Vanadium 13.4 * MS 7440-66-6 Zinc 2470 D*E MS | 2.5 0 |
| 7439-89-6 Iron 7439-92-1 Lead 255. MS 7439-95-4 Magnesium . . 7439-96-5 Manganese 2410 D* MS 7439-97-6 Mercury . . . 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium 7782-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium 7440-62-2 Vanadium 0.26 J . . MS 7440-66-6 Zinc 2470 D*E MS | |
| 7439-92-1 Lead 255. MS 7439-95-4 Magnesium . . 7439-96-5 Manganese 2410 D* MS 7439-97-6 Mercury 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium 7782-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium . . . MS 7440-62-2 Vanadium 0.26 J . MS 7440-66-6 Zinc 2470 D*E MS | 11 2 |
| 7439-95-4 Magnesium 7439-96-5 Manganese 2410 D* MS 7439-97-6 Mercury | 7 |
| 7439-96-5 Manganese 2410 D* MS 7439-97-6 Mercury 3.3 E MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium N MS 742-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium MS 7440-28-0 Thallium 0.26 J MS 7440-62-2 Vanadium 13.4 * MS 7440-66-6 Zinc 2470 D*E MS | 7 |
| 7439-96-5 Manganese 2410 D* MS 7439-97-6 Mercury 3.3 E MS 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium N MS 742-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium MS 7440-28-0 Thallium 0.26 J MS 7440-62-2 Vanadium 13.4 * MS 7440-66-6 Zinc 2470 D*E MS | 1 . , |
| 7439-97-6 Mercury 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium | I |
| 7440-02-0 Nickel 3.3 E MS 7440-09-7 Potassium 0.21 J N MS 7482-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium Sodium . MS 7440-28-0 Thallium 0.26 J . MS 7440-62-2 Vanadium 13.4 * MS 7440-66-6 Zinc 2470 D*E MS | |
| 7782-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium | 1 7 7 |
| 7782-49-2 Selenium 0.21 J N MS 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium | 1 - 4 |
| 7440-22-4 Silver 0.22 J N MS 7440-23-5 Sodium | 1 6.2 U" |
| 7440-23-5 Sodium 7440-28-0 Thallium 0.26 J MS 7440-62-2 Vanadium 13.4 *. MS 7440-66-6 Zinc 2470 D*E MS | 1,20 |
| 7440-28-0 Thallium 0.26 J MS 7440-62-2 Vanadium 13.4 *. MS 7440-66-6 Zinc 2470 D*E MS | 1 |
| 7440-62-2 Vanadium 13.4 *. MS 7440-66-6 Zinc 2470 D*E MS | 11211 |
| 7440-66-6 Zinc 2470 D*E MS | 1.20 |
| | 7 2 |
| | 1 2 |
| | 7 0 |
| | 1 |
| · · · · · · · · · · · · · · · · · · · | _ |
| lor Before: RED Clarity Before: Texture: MEDIU | 1 |
| lor After: COLORLESS Clarity After: CLEAR Artifacts: | |
| mmonto. | |
| omments: | |
| E: The reported value is estimated due to the presence of interfere | ice. |

EPA SAMPLE NO.

| M | 13 3 | ₹ 5 | ᅜ | a | |
|---|------|-----|---|---|--|

| Lab Name | : ALS Labor | atory Group | Contract: | EPW09 | 036 | | | |
|-------------------|-------------|----------------|------------------------|----------|---------------|--------|--------------|---------------|
| Lab Code | DATAC | Case No.: 4075 | Mod. Ref. | No.: | SDG | No.: 1 | MH35E5 | |
| Matrix: | Soil | | Lab Sample | ID: | 1030768015 | | | |
| Solids | 76 1 | | Nate Recei | ved• | 11/03/2010 | | | |
| , politus | 70.1 | | Date Recei | vea. | 11,03,2010 | | | |
| Concentr | ation Units | ug/L, ug or | mg/kg dry weigh | ıt): n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 8860 | | | P | 1 | |
| | 7440-36-0 | Antimony | | | | | 1 | |
| | 7440-38-2 | Arsenic | | | | | 1 | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | l | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 2020 | · | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | · | | _ | |
| | 7440-50-8 | Copper | | <u> </u> | - | | | |
| | 7439-89-6 | Iron | 67200 | | D | P |] | |
| | 7439-92-1 | Lead | | | | Į | | |
| | 7439-95-4 | Magnesium | 5080 | | <u> </u> | P | <u>.</u> . | • |
| | 7439-96-5 | Manganese | | | | |] | |
| | 7439-97-6 | Mercury | | | | | 1 | |
| | 7440-02-0 | Nickel | | | | | <u> </u> _ , | w |
| | 7440-09-7 | Potassium | 933. | | E | P | J+ 657 | ~ |
| | 7782-49-2 | Selenium | | | | | 1 | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 62.4 | J | E | P | J 65 1 | \mathcal{O} |
| | 7440-28-0 | Thallium | | | ; | |] | 2/ |
| | 7440-62-2 | Vanadium | | | 2 / | | _ | |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | ļ | 1 | |
| | | | | | | | 4 | |
| | <u></u> | | <u> </u> | | · | | _ | |
| olor Be | fore: BROWN | Clarit | ty Before: | | Tèxture: M | EDIUM | | _ |
| olor Af | ter: YELLOW | Clarit | ty After: <u>CLEAR</u> | | Artifacts: | | | _ |
| | | | | | | | | |
| omments E: The | | value is estim | nated due to the | pres | ence of inter | feren | ice. | |
| | <u> </u> | | | | | **** | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

| MH35F9 | |
|--------|--|
| | |

| | | | | | <u> </u> | | | |
|----------|----------------|----------------|-----------------|----------|---------------|--------|---------|---------|
| Lab Name | ALS Labor | atory Group | Contract: | EPWO9 | 9036 | | | |
| Lab Code | DATAC (| Case No.: 4075 | Mod. Ref. | No.: | SDG | No.: I | MH35E5 | 5 |
| Matrix: | Soil | | Lab Sample | ID: | 1030768015 | _ | | |
| 0 0 111 | | | | | | | | |
| % Solids | 5: <u>/6.1</u> | | Date Recei | ved: | 11/03/2010 | | | |
| | | | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): n | ng/kg | | | |
| | CAC No | 77 | | | T . | Т | 1 | |
| | CAS No. | Analyte | Concentration | С | Q | M | 1 | |
| | 7429-90-5 | Aluminum | | <u> </u> | | |] | IN |
| | 7440-36-0 | Antimony | 0.41 | J | И | MS | 1.3 | UN |
| | 7440-38-2 | Arsenic | 34.0 | | E | MS | J | 10 |
| | 7440-39-3 | Barium | 191. | | * | MS |]] | 8 1h |
| | 7440-41-7 | Beryllium | 0.46 | J | E | MS | 0.66 | U |
| | 7440-43-9 | Cadmium | 2.0 | | *NE | MS | エ | BE |
| | 7440-70-2 | Calcium | | | | | | VΔ. |
| | 7440-47-3 | Chromium | 7.0 | | * | MS | 1- | 3191 |
| | 7440-48-4 | Cobalt | 5.5 | **** | E | MS | | N |
| | 7440-50-8 | Copper | 76.4 | | NE | MS |] J 7 | W |
| | 7439-89-6 | Iron | | | | |] | |
| | 7439-92-1 | Lead | 361. | | | MS | 1 | |
| | 7439-95-4 | Magnesium | | | | |] | RA |
| | 7439-96-5 | Manganese | 804. | | D* | MS | 1 3 | 3/9/11 |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | 3.6 | | E | MS | 1 7 | K |
| | 7440-09-7 | Potassium | | ,- | | | 1 - | |
| | 7782-49-2 | Selenium | 1.1 | J | N | MS | 3.3 | n I |
| | 7440-22-4 | Silver | 1.4 | | N | MS | 7+ | 1/2 |
| | 7440-23-5 | Sodium | | • | | | ~ | |
| | 7440-28-0 | Thallium | 0.36 | J. | *** | MS | 0.60 | 5 U. T. |
| | 7440-62-2 | Vanadium | 45.2 | , | * | MS | J+ 0.60 | 219/1 |
| | 7440-66-6 | Zinc | 478. | , | *E | MS | Ī | n In |
| | 57-12-5 | Cyanide | | | | | | 2/18/ |
| | | | <u></u> | | * | | | |
| | | | | 1 | - | | | |
| Color Be | fore: BROWN | Clarit | y Before: | - 31 | Texture: M | EDIUM | • | |
| Color Af | ter: BROWN | Clarit | y After: CLEAR | | | | · | |
| | | · | | | | ****** | 58.5 | _ |
| Comments | | | | | _ | _ | | |
| E: The | reported v | alue is estima | ated due to the | pres | ence of inter | feren | ce. | |

1

. . . .

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| EPA | SAMPLE | NO. | |
|-----|--------|-----|--|
| | MH35G0 | • | |

| Lab Name | e: ALS Labor | atory Group | Contract: | EPW090 |)36 | | |
|----------|--------------|--|------------------|----------------|---------------------------------------|--------------|----------------|
| Lab Code | e: DATAC (| Case No.: <u>407</u> 5 | 55 Mod. Ref. | No.: _ | SDG | No.: 1 | MH35E5 |
| Matrix: | Soil | | Lab Sample | ID: 1 | 1030768016 | | |
| Solids | s: 73.1 | | Date Recei | ved: 1 | 1/03/2010 | | |
| | | | | _ | | | |
| oncentr | ration Units | (ua/I. ua or | mg/kg dry weigh | +) • mc | r/ka | | |
| | | 1 1 | mg, ng dry norgh | | ···· | | 1 |
| | CAS No. | Analyte | Concentration | c | Q | M | |
| | 7429-90-5 | Aluminum | 10400 | | · · · · · · · · · · · · · · · · · · · | P | † |
| | 7440-36-0 | Antimony | | | | 1 | 1 |
| | 7440-38-2 | Arsenic | | | | | 1 |
| | 7440-39-3 | Barium | | | | + | 1 |
| | 7440-41-7 | Beryllium | | - | ······ | + | 1 |
| | 7440-43-9 | Cadmium | | | | + | - |
| | 7440-70-2 | Calcium | 1350 | | | P | - |
| | 7440-47-3 | Chromium | 1550 | | | +- | - |
| | 7440-48-4 | Cobalt | | - | | + | - |
| | 7440-50-8 | | | | | | |
| | | Copper | 27000 | | | + | 1 |
| | 7439-89-6 | Iron | 37000 | | | P | |
| | 7439-92-1 | Lead | 2050 | | | | |
| | 7439-95-4 | Magnesium | 3850 | | | P | · |
| | 7439-96-5 | Manganese | | | | 1 | [|
| | 7439-97-6 | Mercury | | | | : | |
| | 7440-02-0 | Nickel | | | | | - 14 |
| | 7440-09-7 | Potassium | 1310 | | E | P | 17 + 2 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | |
| | 7440-23-5 | Sodium | 56.6 | · J | E | P | J+ # 684 U 2/1 |
| | 7440-28-0 | Thallium | · | | | 1 | ali |
| | 7440-62-2 | Vanadium | . | ' [| | |]. ~ ~ i · · |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | - | | | | |
| | | | | | | | |
| | | | | | | | |
| | | W- 10 | | | | | • |
| olor Be | fore: BROWN | Clarit | y Before: | · · | _ Texture: M | EDIUM | |
| olor Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | |
| | • | | <u> </u> | | <u> </u> | | |
| omments | : | | | | | | |
| E: The | e reported v | alue is estima | ated due to the | prese | nce of inter | feren | ce. |
| | V** | | | | | | |
| | | | | | | | |

| | | | | | | MH35 | G0 | |
|---------|---------------|----------------|-----------------------|---------|---------------|-------------|--------|---|
| .b Name | e: ALS Labora | tory Group | Contract: | EPW090 |)36 | | | |
| b Code | e: DATAC C | Case No.: 4075 | Mod. Ref. | No.: _ | SD0 | G No.: j | MH35E! | 5 |
| trix: | Soil | | Lab Sample | ID: 3 | L030768016 | | | |
| Solids | : 73.1 | | Date Recei | ved:] | 11/03/2010 | | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | at): mg | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | | | V-7-2-4-1-1-1 | | 1 | |
| | 7440-36-0 | Antimony | 0.42 | J | N | MS | 1.4 | OTPO M M M N N N N N N N N N N N N N N N N |
| | 7440-38-2 | Arsenic | 46.9 | | DE | MS | Τ, | gh |
| | 7440-39-3 | Barium | 314. | | * | MS | 1 3 | U |
| | 7440~41-7 | Beryllium | 0.96 | J | DE | MS | 1+ | H |
| 1 | 7440-43-9 | Cadmium | 0.35 | J | *NE | MS | 7.6 | 802 |
| | 7440-70-2 | Calcium | ** | | | | | رر ک |
| | 7440-47-3 | Chromium | 7.8 | | D* | MS | 3 | |
| | 7440-48-4 | Cobalt | 14.8 | | DE | MS | 7 | Jr 3 |
| | 7440-50-8 | Copper | 77.1 | | DNE | MS | 1 7 | The |
| | 7439-89-6 | Iron | · | | 9.4- | | ~ | |
| | 7439-92-1 | Lead | 342. | | | MS | 1 | |
| | 7439-95-4 | Magnesium | | | | | | <u>ند</u> در - |
| | 7439~96-5 | Manganese | 1560 | | D* | MS | 1 | - 48 I |
| | 7439-97-6 | Mercury | | | | | | 2/411 |
| | 7440-02-0 | Nickel | 7.5 | | DE | MS | T | W |
| | 7440-09-7 | Potassium | | | 1011 | 110 | ر | - |
| İ | 7782-49-2 | Selenium | 1.1 | J | DN | MS | 24 | 11 70 |
| l | 7440-22-4 | Silver | 1.5 | | N | MS | 777 | The |
| ŀ | 7440-23-5 | Sodium | 1.0 | - | 14 | IND | ۱ ا | 9 |
| L | 7440-28-0 | Thallium | 0.75 | | | MS | T+ | to. |
| | 7440-62-2 | Vanadium | 48.6 | | D* | MS | 1 | 49-14-1 |
| | 7440-66-6 | Zinc | 144. | - | D*E | MS | 77 | 1 319 |
| | 57-12-5 | Cyanide | TAA. | | <u>D</u> E | - GPI | ٦ . | 21911 10 22 10 12 10 13/19 10 18/11 |
| ŀ | J7 12 J | Cyanitue | · | | | | | 4 [18] |
| ŀ | | | | | * | | | |
| Ĺ | ٧. | 1 | | | - | | | |
| or Bef | fore: BROWN | Clarit | y Before: <u>⊰</u> | | Texture: | MEDIUM | | |
| | er: BROWN | | y After: <u>CLEAR</u> | | | | | ··· |
| | | | J III COLL OPPIN | | _ 111 C11400 | · | | |
| ments: | : | | | | | | | |
| | | alue is estima | ated due to the | prese | nce of inte | rferen | 70 | |
| | | TO COCIIII | accurate to the | prese. | ILCO OT THE | | · · | |
| | | | | | | | | |

EPA SAMPLE NO.

MH35G1

| ab Cod | e: DATAC | Case No.: <u>407</u> | Mod. Ref. | No.: | SDG | No.: 1 | MH35E5 |
|----------|---|----------------------|-----------------|--------|-------------|--------------|------------------|
| Matrix: | Soil | | Lab Sample | ID: | 1030768017 | | |
| & Solid | s: <u>26.3</u> | | Date Recei | ved: | 11/03/2010 | | |
| Concent: | ration Units | ug/L, ug or | mg/kg dry weigh | nt): m | ıg/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 5070 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | _ |
| | 7440-39-3 | Barium | · | | | | _ |
| | 7440-41-7 | Beryllium | | | | | 1 |
| | 7440-43-9 | Cadmium | 1150 | | ~~**** | | 1900 U |
| | 7440-70-2 7440-47-3 | Calcium | 1150 | J | | P | 19000 |
| | 7440-47-3 | Cobalt | | | | - | - |
| | 7440-50-8 | Copper | | | **** | | 4 |
| | 7439-89-6 | Iron | 341000 | | D | P | - |
| | 7439-92-1 | Lead | 341000 | - | <u>D</u> | ┼╌ | - |
| | 7439-95-4 | Magnesium | 21-30 . | | ····· | P | |
| | 7439-96-5 | Manganese | | | | + | |
| | 7439-97-6 | Mercury | | | | | i |
| | 7440-02-0 | Nickel | ` ` | | | | 1 |
| | 7440-09-7 | Potassium | 1160 | J | E | P | 1900 U |
| | 7782-49-2 | Selenium | | 1 | 10011 | 1 - | 1 ` |
| | 7440-22-4 | Silver | | | | |] |
| | 7440-23-5 | Sodium | 77.5 | J | E | P | 1900 U |
| | 7440-28-0 | Thallium | | | | | 1900 U 1900 U |
| | 7440-62-2 | Vanadium | | | | | J 4-1 |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | <u> </u> | | | _ | |
| | *************************************** | | | | | <u> </u> | |
| | <u> </u> | | <u> </u> | | #-1 | | |
| olor Be | fore: BROWN | Clarit | y Before: | | Texture: M | EDIUM | |
| olor Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | |
| omments | | | | | | | |
| | | | ated due to the | | | _ | |

| | | | | | | МНЗ | 26T | |
|--------|----------------|----------------------|------------------|-------------|----------------|---------------------------------------|------------------|----------------------------|
| o Name | e: ALS Labor | atory Group | Contract: | EPW09 | 036 | | | |
| o Code | DATAC | Case No.: <u>407</u> | 55 Mod. Ref. | No.: | | SDG No.: | MH35E. | 5 |
| crix: | Soil | | Lab Sample | ID: | 10307680 | 17 | | |
| Solids | s: <u>26.3</u> | | Date Recei | ved: | 11/03/20 | 10 | | |
| | | , ,- | ,, , | | | | | |
| icenti | ration units | (ug/L, ug oi | mg/kg dry weigh | it): m | g/ kg | · · · · · · · · · · · · · · · · · · · | _ | |
| | CAS No. | Analyte | Concentration | C | Q | M | | |
| | 7429-90-5 | Aluminum | | | | | 7 | |
| | 7440-36-0 | Antimony | 1.4 | J | N | MS | 7.8 | UST. |
| | 7440-38-2 | Arsenic | 115. | | E | MS | 7 - | B |
| | 7440-39-3 | Barium | 80.6 | | * | MS | ヿ゙゙゙゙゙゙゙゙゙゙゙ | 16 |
| | 7440-41-7 | Beryllium | 0.29 | J | E | MS | 1191 |) 11 |
| | 7440-43-9 | Cadmium | 0.45 | J | *NE | | 11.97 | 0 1 |
| | 7440-70-2 | Calcium | | | ***** | | ┤'''` | · · |
| | 7440-47-3 | Chromium | 6.2 | | * | MS | 7 = | |
| | 7440-48-4 | Cobalt | 2.1 | | E | MS | 14 | 11 |
| | 7440-50-8 | Copper | 112. | | NE | MS | 7 7 | W |
| | 7439-89-6 | Iron | | | | | - *1 | |
| | 7439-92-1 | Lead | 1700 | | | MS | 1 | |
| | 7439-95-4 | Magnesium | | | | | ┪. | |
| | 7439-96-5 | Manganese | 540. | | * | MS | T | -4-1 |
| | 7439-97-6 | Mercury | | | , | | | 3 |
| | 7440-02-0 | Nickel | . 2.3 | | E | MS | $\dashv \tau$ | 74 |
| | 7440-09-7 | Potassium | · · · | | | | ┧ ~ | |
| | 7782-49-2 | Selenium | 0.63 | J | N | MS | 95 | -1-1-36 |
| | 7440-22-4 | Silver | 4.1 | | N | MS | ∀∀ ≠ | · In |
| | 7440-23-5 | Sodium | · | | - - | | ┤~ : | |
| | 7440-28-0 | Thallium | 0.43 | J | | MS | 1.9 | 1) 3 |
| | 7440-62-2 | Vanadium | 96.9 | | * | MS | ∃' <u>'</u> | U 31 |
| | 7440-66-6 | Zinc | 177. | | *E | MS | Ŧ | 32 |
| | 57-12-5 | Cyanide | · · - | | | | | - 11 -1 21-2 |
| : | | | | | | | 1 | |
| or Be | fore: ORANGE | : Clari | ty:Before: | • | Textuu | re: MEDIUN | л | |
| | | | ty After: CLEAR | | | | | |
| | | Clari | cy Arcer. Chean | | ALCILO | | | |
| ments | | oluo ia oati | | | | | | |
| r: Tue | : reborced A | arue is estin | mated due to the | prese | ence of 1 | nterrere | ice. | |

| MH35G | 2 |
|-------|---|

| | | | | | | | | | ! |
|-----------|-------------|----------------|---------------------------------------|---------------|---|--|---------------|--------|-------------|
| Lab Name | : ALS Labor | atory Group | Contract: | EPW09 | 9036 | | | | |
| Lab Code | e: DATAC (| Case No.: 4075 | Mod. Ref. | No.: | | SDG N | lo.: <u>I</u> | MH35E5 | |
| Matrix: | Soil | | Lab Sample | e ID: | 10307680 | 18 | | | |
| % Solids | s: 63.9 | | Date Recei | .ved: | 11/03/20 | 010 | | | |
| | | | | | | ·· · · · · · · · · · · · · · · · · · · | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt):m | ıg/kg | | | | |
| | CAS No. | Analyte | Concentration | С | 0 | | М |] | |
| | 7429-90-5 | Aluminum | 6160 | | | | P | - | |
| | 7440-36-0 | Antimony | | | | | | i | |
| | 7440-38-2 | Arsenic | **** | | | | | 1 | |
| | 7440-39-3 | Barium | | | | | | 1 | |
| | 7440-41-7 | Beryllium | | | | | | 1 | |
| | 7440-43-9 | Cadmium | | | · · · · · · · · · · · · · · · · · · · | | | 1 | |
| | 7440-70-2 | Calcium | 867. | | ······ | | P | 1 | |
| | 7440-47-3 | Chromium | -W- | | 1800 | | | i | |
| | 7440-48-4 | Cobalt : | | | , | W.L. | | 1 | |
| | 7440-50-8 | Copper | | | ··· | | - 104-b | | |
| | 7439-89-6 | Iron | 57100 | | | | P | | |
| | 7439-92-1 | Lead | | İ | | *** | | | |
| | 7439-95-4 | Magnesium - | 2360 | | | | P· | | |
| | 7439-96-5 | Manganese | | | | | | | • |
| | 7439-97-6 | Mercury | | | **** | | | | |
| | 7440-02-0 | Nickel | | | | | | | 44 |
| | 7440-09-7 | Potassium _ | 1350 | | E | | P | T+ | 12 |
| | 7782-49-2 | Selenium | | | | | | _~ | |
| | 7440-22-4 | Silver | | | | | | | -1 |
| | 7440-23-5 | Sodium | 100. | Ŋ | E | | P | 782 | UT |
| | 7440-28-0 | Thallium: | | | | | | , - | 2/18/1 |
| | 7440-62-2 | Vanadium: | | | | | **** | | 2/18/1 |
| | 7440-66-6 | Zinc . | | | | | | | |
| | 57-12-5 | Cyanide | | | | | | | |
| | *** | ļ | | | | | | | |
| i | | <u> </u> | · · · · · · · · · · · · · · · · · · · | i | | | | | |
| Color Be | fore: BROWN | Clarit | y Before: | | Textu | ce: ME | DIUM | | |
| | | | y After: CLEAR | | | | | | _ |
| | | | | | _ | | | | _ |
| Comments: | | | | | | | | | |
| E: The | reported va | alue is estima | ated due to the | prese | ence of i | nterf | eren | ce. | |
| | | | | | | | | | _ |
| | | | | | | | • | | _ |
| | | | | | | | | | |

USEPA - CLP 1B-IN

EPA SAMPLE NO. INORGANIC ANALYSIS DATA SHEET

| ~~ ************************************ | 110 1 |
|---|-------|
| | |
| | |
| AKTIOF CO. | |
| MH35G2 | |
| | |

| | | | | | L_ | MII J | | | |
|---------|--------------|-----------------|---|---------------|----------|----------|------------|-----------------|-----------------|
| ab Name | : ALS Labora | atory Group | Contract: | EPW0903 | 36 | | | | |
| ab Code | DATAC (| Case No.: 4075 | Mod. Ref. | No.: | S | DG No.: | MH35E | 5 | |
| trix: | Soil | | Lab Sample | : ID: 10 | 03076801 | 3 | | | |
| Solids | : 63.9 | | Date Recei | ved: <u>1</u> | 1/03/201 | 0 | | | |
| | | | | | | | | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | it): mg/ | 'kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | 7 | | |
| | 7429-90-5 | Aluminum | | | | | 7 | | |
| | 7440-36-0 | Antimony | 0.44 | J | N | MS | 0.7 | UJ | 124 |
| | 7440-38-2 | Arsenic | 24.3 | | E | MS | T | | U |
| | 7440-39-3 | Barium | 226. | | * | MS | オオ | | 1 |
| | 7440-41-7 | Beryllium | 0.47 | J | E | MS | 70.7 | 8U | 3 |
| | 7440-43-9 | Cadmium | 0.44 | J | *NE | MS | 0.2 | 81) | W |
| | 7440-70-2 | Calcium | *** | | | | 70'' | • | |
| | 7440-47-3 | Chromium | 6.9 | | * | MS | 1 I | | -4. 3 |
| | 7440-48-4 | Cobalt | 2.9 | | E | MS | 7 | -# | 3 |
| | 7440-50-8 | Copper | 47.8 | | NE | MS | 17 | U | |
| | 7439-89-6 | Iron | *************************************** | | | | 1 " | · | |
| | 7439-92-1 | Lead | 304. | | | MS | 1 | | |
| - : | 7439-95-4 | Magnesium | | | | | ╡ | | 11 |
| | 7439-96-5 | Manganese | 407. | | * | MS | 1 | 71 | -\ \ |
| | 7439-97-6 | Mercury | | | | | 1 | , | Si |
| | 7440-02-0 | Nickel | 2.8 | | E | MS | 3.9 | W | |
| | 7440-09-7 | Potassium | | | | | | | |
| | 7782-49-2 | Selenium | 2.0 | J | N | MS | 3.9 | -∪ ₩ | سنا |
| | 7440-22-4 | Silver | 1.9 | | N | MS | 17+ | 34 | |
| | 7440-23-5 | Sodium | | | | | ~ | | |
| ĺ | 7440-28-0 | Thallium | 0.80 | *** | **** | MS | 17+ | \mathcal{H} | |
| | 7440-62-2 | Vanadium | 56.3 | | * | MS | 1 | -37 | -14 |
| [| 7440-66-6 | Zinc | 131. | | *E | MS | 17 | 71 | 3 |
| | 57-12-5 | Cyanide | | | | | 1 - | 2 | // |
| Ì | | | | | | |] | | |
| or Bei | fore: BROWN | Clarity | Before: | | Texture | : MEDIUM | | | |
| or Aft | er: BROWN | Clarity | After: CLEAR | | Artifac | ts: | | | |
| ments: | | | | | | | | | |
| | | alua is octiona | ted due to the | ~~~~~ | | | | | |
| | TOPOTICE VO | THE TO EDITING | -ea aue to the | NTG26U(| se or in | cerrer | ce. | | |

| 1/4111つ 日 (**) | |
|----------------|--|
| 1918.3.3(7.3 | |
| | |

| b Code | : DATAC (| Case No.: 40755 | Mod. Ref. | No.: | SDG | No.: | MH35E5 | |
|----------|---------------------------------------|-----------------|-----------------|-------|---------------|---------|------------|---------------|
| trix: | · · · · · · · · · · · · · · · · · · · | | | | 1030768019 | • | | |
| Solids | . 70 6 | | _ | | | | | _ |
| POTTOS | . 70.0 | | Date Recei | vea: | 11/03/2010 | | | _ |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | 7840 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | _ | |
| | 7440-41-7 | Beryllium | | | | |] | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1120 | ··· | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | _ | |
| | 7440-50-8 | Copper | | | | | 1 | |
| | 7439-89-6 | Iron | 33000 | | | P | _ | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 6800 | | * | P | | |
| | 7439-96-5 | Manganese | | | | \perp | _ | |
| | 7439-97-6 | Mercury | | | | | 4 | |
| | 7440-02-0 | Nickel | | | | | | |
| | 7440-09-7 | Potassium | 510. | J | Е | P | 636 | \mathcal{D} |
| | 7782-49-2 | Selenium | | | | | 1 | |
| | 7440-22-4 | Silver | | | | | 101 | . 1 |
| | 7440-23-5 | Sodium | 25.2 | J | E | P | 636 | ν |
| | 7440-28-0 , | Thallium | | | | | 636 636 | , |
| | 7440-62-2 | Vanadium | | | | \perp | 4 | • |
| | 7440-66-6 | Zinc | | | | | 4 | |
| | 57-12-5 | Cyanide | | : | | | 4 | |
| | | ļ. | | | | | 4 | |
| | | <u> </u> | | | | | _ | |
| olor Be | fore: BROWN | ·: Clarity | Before: | | Texture: (| COARSE | | _ |
| | er: YELLOW | | After: CLEAR | | Artifacts | | | |
| | | | | | | | | _ |
| comments | | | | | | | | |
| E: The | reported va | alue is estima | ted due to the | pres | ence of inter | rferen | ice. | |

| CIM | 502 | |
|-----|-----|--|

| ab Name | : ALS Labora | tory Group | Contract: [| EPW09 | 036 | | | |
|----------|--------------|-----------------|-----------------|-------|---------------|--------|-----------------------------|-------------------|
| Lab Code | : DATAC C | Case No.: 40755 | Mod. Ref. | No.: | SDG | No.: 1 | MH35E5 | |
| Matrix: | Soil | | Lab Sample | ID: | 1030768019 | | | |
| Solids | : 78.6 | | Date Recei | ved: | 11/03/2010 | | | |
| | | | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): m | .g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | | | | ĺ | | |
| | 7440-36-0 | Antimony | 0.59 | J | N | MS | 1.3 05 | J |
| | 7440-38-2 | Arsenic | 37.7 | | E | MS | t [| B |
| | 7440-39-3 | Barium | 95.5 | | * | MS | 了 | 1 |
| | 7440-41-7 | Beryllium | 0.46 | J | E | MS | 1.3 UT 0.64 U | H |
| | 7440-43-9 | Cadmium | 17.5 | | *NE | MS | τ[| T |
| | 7440-70-2 | Calcium | | | | | | . 1 |
| | 7440-47-3 | Chromium | 7.9 | | * | MS | T 8 | ياسرو |
| | 7440-48-4 | Cobalt | 9.3 | | E | MS | I | L , |
| | 7440-50-8 | Copper | 159. | | NE | MS | 丁一万 | |
| | 7439-89-6 | Iron | | | | |] | |
| | 7439-92-1 | Lead | 847. | | D | MS | | |
| | 7439-95-4 | Magnesium | | | | |] | 14 |
| | 7439-96-5 | Manganese | 1200 | | D* | MS | T | 77. 3 |
| | 7439-97-6 | Mercury | | Ü | · | |] | • |
| | 7440-02-0 | Nickel | 7.1 | | E | MS | J | * |
| | 7440-09-7 | Potassium | | | | |] | /_ |
| | 7782-49-2 | Selenium | 0.92 | J | N | MS | 3,200 | ٦ |
| | 7440-22-4 | Silver | 2.9 | | N | MS | J+ | |
| | 7440-23-5 | Sodium | | | | i | | Ī |
| | 7440-28-0 | Thallium | 0.42 | J | | MS | 0.64 U | |
| | 7440-62-2 | Vanadium | 65.9 | | * | MS | 3.2 UT T+ 0.64 U J | -24 |
| į | 7440-66-6 | Zinc | 4910 | | D*E | MS | $\int \mathcal{J}$ | 17 |
| | 57-12-5 | Cyanide | | | | |] [] ' | \mathcal{H}_{l} |
| | | | | | | |] . | |
| | | | | | | |] | |
| alaw D- | - DOWN | 01/- | Defense | | Marst C | | • | |
| oror Rei | ore: BROWN | Clarity | Before: | | Texture: C | UARSE | 1.51 | |
| olor Aft | er: COLORLE | SS Clarity | After: CLEAR | | Artifacts: | | | |
| omments: | | ٥ | | | | | | |
| E: The | reported v | alue is estima | ted due to the | pres | ence of inter | feren | .ce. | |
| | -1 | | | | | | | |

| MH35G4 | |
|---------|--|
| PUCCIII | |

| | | | 55 Mod. Ref. | | | - | | |
|---------|---|--------------|---|---------------------------------------|---|--------|--------|----------------|
| datrix: | Soil | | ran sampre | TD: | 1030768020 | | | _ |
| Solid | s: <u>61.5</u> | | Date Recei | ved: | 11/03/2010 | | | |
| | | | | | | | | |
| Concent | ration Units | (ug/L, ug or | mg/kg dry weigh | nt): n | ıg/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | 1 | |
| | 7429-90-5 | Aluminum | 6640 | | | P | 1 | |
| | 7440-36-0 | Antimony | | | | | 7 | |
| | 7440-38-2 | Arsenic | | | | | 1 | |
| | 7440-39-3 | Barium | | | | | 1 | |
| | 7440-41-7 | Beryllium | *************************************** | | | | 1 | |
| | 7440-43-9 | Cadmium | | | -1-21 | | 1 | |
| | 7440-70-2 | Calcium | 1050 | | | P | 1 | |
| | 7440-47-3 | Chromium | | | | | 1 | |
| | 7440-48-4 | Cobalt | | · · · · · · · · · · · · · · · · · · · | | | 1 . | |
| | 7440-50-8 | Copper | · · · · · · · · · · · · · · · · · · · | | | | 7 ''' | |
| | 7439-89-6 | Iron | 81600 | | D | P | 1 | |
| | 7439-92-1 | Lead | | | | | 7 | |
| | 7439 -95-4 | Magnesium | 3090 | | | P | 7 | |
| | 7439-96-5 | Manganese | <u> </u> | | | | | |
| | 7439-97-6 | Mercury | | | | | 1 | |
| | 7440-02-0 | Nickel | | | | | 1 | |
| | 7.440-09-7 | Potassium | 1230 | | E | P | 17+ | Th |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | _ | |
| | 7440-23-5 | Sodium | 94.7 | J | E | P | 1813 | U Tr |
| | 7440-28-0 | Thallium | | | | | 于安 | U I2- 2/18/ |
| | 7440-62-2 | Vanadium | | | *************************************** | |] ` ` | 2/181 |
| | 7440-66-6 | Zinc | | | | |]. | |
| | 57-12-5 | Cyanide | | | | |] | · |
| | | | | | | |] , | |
| | , | | | | | |]` | |
| Color B | efore: BROWN | Clari | ty Before: | | Texture: | MEDIUM | 1 - 33 | |
| | | | | | | | | _ |
| Color A | fter: YELLOW | Clari | ty After: <u>CLEAR</u> | | Artifacts | : | | |
| Comment | e. | | | | | | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. MH35G4

| | | tory Group | | **** | | | |
|--------------|--------------|----------------|-----------------------|--------|----------------|----------|------------------------|
| Code | : DATAC C | Case No.: 4075 | Mod. Ref. | No.: | SDG 1 | No.: 1 | 4H35E5 |
| rix: | Soil | | Lab Sample | ID: | 1030768020 | | |
| Solids | : 61.5 | | Date Recei | ved: | 11/03/2010 | | |
| | | | | | | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): n | ıg/kg | | _ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | <u> </u> | |
| | 7440-36-0 | Antimony | 0.33 | J | N | MS | 1.6 05 |
| | 7440-38-2 | Arsenic | 34.7 | | E | MS | 0,810 |
| | 7440-39-3 | Barium | 250. | | * | MS | I |
| | 7440-41-7 | Beryllium | 0.56 | J | E | MS | 0,810 |
| | 7440-43-9 | Cadmium | 2.7 | | *NE | MS |] |
| | 7440-70-2 | Calcium | | | | | 1 - |
| £ | 7440-47-3 | Chromium | 9.9 | | * | MS | 1 |
| -^} | 7440-48-4 | Cobalt | 6.4 | | E | MS | J 8 |
| | 7440-50-8 | Copper | 60.0 | | NE | MS | J |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 346. | | | MS | |
| | 7439-95-4 | Magnesium | , | | - | 1 | |
| - | 7439-96-5 | Manganese | 1380 | | D* | MS | 17-4 |
| | 7439-97-6 | Mercury | | | | MS J | |
| | 7440-02-0 | Nickel | 4.7 | | | | I I |
| ar- | 7440-09-7 | Potassium | """ | | | | 701 |
| | 7782-49-2 | Selenium | 2.0 | J | N | MS | 14 11-13 00 |
| | 7440-22-4 | Silver | 1.7 | | N | MS |]]+ 2 |
| | 7440-23-5 | Sodium | ш.м.я. | | | • |] |
| | 7440-28-0 | Thallium | 0.90 | | | MS | T+ 2 |
| . 1 | 7440-62-2 | Vanadium | 72.2 | | * | MS | J N |
| •- | 7440-66-6 | Zinc | 693. | | *E | MS | 1 n 2 |
| | 57-12-5 | Cyanide | | | | | 2 |
| | | | | | | | |
| ~ ′ | | | ***** | | | | 1 |
| ₹ <u>-</u> ' | <u></u> | | | | | | - |
| or Bè | fore: ORANGE | Clarit | y Before: | | Texture: M | EDFOR | <u> </u> |
| or Af | ter: BROWN | Clarit | y After: <u>CLEAR</u> | | Artifacts: | | |
| ments | | | | | | | |
| | | alue is ostim | nated due to the | nres | sence of inter | ferer | nce. |
| كنند خند | reborrag A | GTME TO COLTH | aced due co che | 2200 | CIICO OF THECH | | ~~~- |

REGION VIII DATA VALIDATION REPORT INORGANIC

| Case/TDD No. | Site N | Vame | Operable Unit |
|-----------------------|------------------|--------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Min | ing District | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | MH35G5 | |

| Review Assigned Date: _ | December 15, 2010 | Data Validator: | Fred Luck | |
|--------------------------|-------------------|------------------|-------------|--|
| Review Completion Date:_ | February 18, 2011 | Report Reviewer: | Lesley Boyd | |

| Sample ID | Matrix | Analysis |
|-----------|---------------|-------------|
| MH35G5 | Sediment | CLP –Metals |
| MH35G6 | | |
| MH35G7 | · | |
| MH35G8 | | • |
| MH35G9 | | |
| МН35Н0 | | |
| МН35Н1 | | `. |
| MH35H2 | | |
| МН35Н3 | | |
| MH35H4 | | |
| МН35Н5 | | |
| МН35Н6 | | |
| МН35Н8 | Mine Sediment | |
| мн35н9 | | |



| Sample ID | Matrix | Analysis |
|-----------|----------------|-------------|
| MH35J0 | Sediment | CLP –Metals |
| MH35J1 | | |
| MH35J2 | Mine Sediment | |
| МН35J3 | Sediment | |
| MH35J4 | Soil - Surface | · |
| MH35J5 | | |

DATA QUALITY STATEMENT

| () | Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer. |
|-----------|---|
| () (X) | Data are UNACCEPTABLE according to EPA Functional Guidelines. Data are acceptable with QUALIFICATIONS noted in review. |
| Teleph | ne/Communication Logs Enclosed? Yes NoX |
| CLP P | oject Officer Attention Required? Yes No X If yes, list the items that require |

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 40755, SDG No. MH35G5, consisted of twenty sediment / mine sediment / soil —surface samples for metals by ICP-AES and ICP-MS (ISM01.2). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|---|-----------|---|--------------------------|-------------------|
| MH35G5, MH35G6, MH35G7, MH35G8, MH35G9, MH35H1, MH35H2, MH35H3, MH35H4, MH35H5, MH35H6, MH35H9, MH35J0, MH35J1, MH35J2, MH35J3, MH35J4, MH35J5 | Antimony | U | Blank Contamination | 3 |
| MH35G5, MH35G6, MH35G7, MH35G9, MH35H0, MH35H1, MH35H2, MH35H3, MH35H4, MH35H5, MH35H6, MH35H8, MH35H9, MH35J1, MH35J2, MH35J3, MH35J4, MH35J5 | Beryllium | Vermande avec and a second and | | |
| MH35G6, MH35G7, MH35G8, MH35G9, MH35H1, MH35H2, MH35H3, MH35H4, MH35H5, MH35H8, MH35H9, MH35J1, MH35J2, MH35J3, MH35J5 | Cadmium | | | |
| MH35G5, MH35G7, MH35G9, MH35H2, MH35H4, MH35H5, MH35H6, MH35J1, MH35J2 | Calcium | | | |
| мн35н9 | Chromium | | | |
| MH35G7, MH35G9, MH35H0, MH35H8, MH35H9 | Cobalt | | | |
| MH35G7, MH35G9, MH35H0, MH35H2, MH35H4, MH35H8, MH35H9, MH35J1, MH35J2 | Magnesium | | | |
| МН35G7, МН35H0, МН35H8 МН35H9 | Nickel | | | |

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|--|--|------------|--|-------------------|
| MH35G5, MH35G7, MH35G9, MH35H0, MH35H1, MH35H2, MH35H3, MH35H4, MH35H6, MH35H8, MH35H9, MH35J0, MH35J1, MH35J2, MH35J3 | Potassium | Ŭ | Blank Contamination | 3 |
| MH35G5, MH35G6, MH35G7, MH35G8, MH35G9, MH35H0, MH35H1, MH35H2, MH35H3, MH35H4, MH35H5, MH35H6, MH35H8, MH35H9, MH35J0 MH35J1, MH35J2, MH35J3, MH35J4, MH35J5 | Selenium . | | | |
| MH35G7, MH35G8, MH35H1, MH35H8, MH35H9, MH35J2, MH35J3 | Silver | | * | |
| MH35G5, MH35G6, MH35G7, MH35G8, MH35G9, MH35H0, MH35H1, MH35H2, MH35H3, MH35H4, MH35H5, MH35H6, MH35H8, MH35H9, MH35J0, MH35J1, MH35J2, MH35J3, MH35J4, MH35J5 | Sodium | | | |
| MH35G5, MH35G7, MH35G8, MH35G9, MH35H0, MH35H2, MH35H3, MH35H4, MH35H6, MH35H8, MH35H9, MH35J0, MH35J1, MH35J2, MH35J3, MH35J4, MH35J5 | Thallium | | · | |
| MH35G8, MH35J0 | Beryllium | J+ | Potentially false positive | 4 |
| MH35G6, MH35G8, MH35H5, MH35J4, MH35J5 | Potassium | | detection in ICS check sample | |
| All Samples | Thallium | UJ | Potentially false negative detection in ICS check sample | |
| | Selenium, Zinc | J-/ UJ | MS 30 - 74%R, Post Digestion Spike %R < 75% | 7 |
| | Antimony, Silver | 1 /UJ | MS <30%R, Post Digestion Spike %R ≥ 75% | |
| | Arsenic, Beryllium, Cadmium, Chromium, Copper, Manganese, Nickel, Zinc | J | Serial Dilution %D > 10% | 8 |



2.

1. PRESERVATION AND HOLDING TIMES

| All technical | nothing times and preservation enterta were met. |
|-------------------------------|--|
| Yes | No_X_ |
| Comments: | The samples were analyzed within 180 days for the ICP metals. According to the Sample Log-In Sheet and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2 °C. The Sample Log-In Sheet further indicates that neither cooler contained a Cooler Temperature Indicator Bottle, as indicated on the form to be required. There is also no indication that SMO was contacted regarding this issue neither is any documentation of the resolution or indication of how the cooler temperature was derived provided. |
| | When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters. |
| | No other shipping or receiving problems were noted. Chain-of-custody, summary forms, and raw data were evaluated. |
| | NT CALIBRATIONS: INITIAL AND CONTINUING CALIBRATION ION (ICV AND CCV) |
| The initial and requirements. | d continuing calibration verification standards (ICV and CCV, respectively) met SOW |
| Yes_X_ | No |
| Comments: | None. |
| The calibration and 80-120% | n verification results were within 90-110% recovery for metals, 85-115% for cyanide, for mercury. |
| Yes_X_ | No |
| Comments: | None. |
| The continuing | g calibration standards were run at 10% frequency or every two hours. |
| Yes_X_ | No |
| Comments: | None. |
| | |



3. BLANKS

| The initial and | continuing calibration blanks (ICB and CCB, respectively) met SOW requirements |
|-----------------|--|
| Yes_X_ | No |
| Comments: | For the ICP-AES analyses, the ICB was rerun. |
| The continuing | g calibration blanks were run at 10% frequency. |
| Yes_X_ | No |
| Comments: | Continuing calibration blanks were run every 10 samples. |
| | reparation blank was run at the frequency of one per twenty samples, or per sample (whichever is more frequent), and for each matrix analyzed. |
| Yes_X_ | No |
| Comments: | None. |
| All analyzed b | lanks were free of contamination. |
| Yes | No_X_ |
| | |

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:

URS Operating Services, Inc.

Blank Contaminants

| | | | | Concentration | Associated | Concentration | 152 |
|-------|-----------|---------|---------|---------------|------------|----------------|------------|
| Blank | Contam- | CRQL | MDL | Found in | Samples | Found in | Qualifier/ |
| D | inant | (mg/Kg) | (mg/Kg) | Blank (mg/Kg) | Sumples | Sample (mg/Kg) | Adjustment |
| PB | Antimony | 1 | 0.0097 | 0.017 | MH35G5 | 0.44 | 1.3 U |
| | 1 | 1 | 0.0057 | 0.017 | MH35G6 | 0.82 | 1.6 U |
| | | | | | MH35G7 | 1.1 | 2.8 U |
| | | | | | MH35G8 | 0.14 | 1.3 U |
| | | | | | MH35G9 | 1.8 | 3.0 U |
| | | | | | MH35H1 | 0.46 | 3.0 U |
| | | | | | MH35H2 | 0.40 | |
| | | | | | MH35H3 | 0.63 | 2.7 U |
| | | | | | MH35H4 | 0.20 | 1.3 U |
| | | | | | MH35H5 | | 2.8 U |
| | | | | | | 0.47 | 2.2 U |
| | | | | | MH35H6 | 1.6 | 2.7 U |
| | | | | | MH35H9 | 1.2 | 2.9 U |
| | | [| | | MH35J0 | 0.29 | 1.7 U |
| | | | | | MH35J1 | 1.0 | 3.0 U |
| | | i | | | MH35J2 | 1.7 | 3.1 U |
| | |]] | | · | MH35J3 | 0.51 | 3.5 U |
| | | | | | MH35J4 | 0.94 | 1.3 U |
| | | | | | MH35J5 | 0.14 | 1.2 U |
| PB | Beryllium | 0.5 | 0.0032 | 0.013 | MH35G5 | 0.25 | 0.63 U |
| | | | | | MH35G6 | 0.38 | 0.79 U |
| | | | | | MH35G7 | 0.13 | 1.4 U |
| | | | | | MH35G9 | 0.74 | 1.5 U |
| | | l i | | | MH35H0 | 0.37 | 1.1 U |
| | | | | | MH35H1 | 1.1 | 1.6 U |
| | | | | | MH35H2 | 0.33 | 1.4 U |
| | | - | | | MH35H3 | 0.23 | 0.64 U |
| | | | | | MH35H4 | 0.41 | 1.4 U |
| | | l | | | MH35H5 | 0.44 | 1.1 U |
| | | | - | | MH35H6 | 0.52 | 1.4 U |
| | | | | | MH35H8 | 0.26 | 1.7 U |
| | | . [| | | MH35H9 | 1.2 | 1.5 U |
| | |] | | | MH35J1 | 0.26 | 1.5 U |
| | | i | | | MH35J2 | 0.13 | 1.5 U |
| | | | - | | MH35J3 | 1.6 | 1.7 U |
| | | | | | MH35J4 | 0.48 | 0.64 U |
| | | | | | MH35J5 | 0.44 | 0.60 U |
| PB | Cadmium | 0.5 | 0.0027 | 0.004 | MH35G6 | 0.73 | 0.79 U |
| | | | | | MH35G7 | 0.11 | 1.4 U |
| | | | | | MH35G8 | 0.42 | 0.64 U |
| | | | | | MH35G9 | 1.2 | 1.5 U |
| | | Ī | | | MH35H1 | 1.1 | 1.6 U |
| | · | | | | MH35H2 | 0.58 | 1.4 U |
| | | | | ļ | MH35H3 | 0.51 | 0.64 U |
| | ſ | 1 | | | MH35H4 | 0.50 | 1.4 U |
| | | | | | MH35H5 | 0.70 | 1.1 U |
| | | | | | MH35H8 | 0.12 | 1.7 U |
| | ļ | | | | MH35H9 | 0.74 | 1.5 U |
| | | | ŀ | İ | MH35J1 | 0.28 | 1.5 U |
| ŀ | | | | ļ | MH35J2 | 1.2 | 1.5 U |
| | | | | 1 | MH35J3 | 1.1 | 1.7 U |
| | | | i | | MH35J5 | 0.11 | 0.60 U. |
| | j | | | | | | - |
| | | | | | | | |

| | | | | Concentration | Associated | Concentration | |
|-------|-------------|---------|---------|---------------|---|--------------------|------------------|
| Blank | Contam- | CRQL | MDL | Found in | Samples | Found in | Qualifier/ |
| l D | inant | (mg/Kg) | (mg/Kg) | Blank (mg/Kg) | , , , , , , , , , , , , , , , , , , , | Sample (mg/Kg) | Adjustment |
| PB | Calcium | 500 | 1.7 | 1.957 | MH35G5 | 195 | 627 U |
| | J | | **' | 1.557 | MH35G7 | 1110 | 1380 U |
| | | | | | MH35G9 | 1390 | 1500 U |
| - | | | | | MH35H2 | 1330 | 1370 U |
| | | | | | MH35H4 | 1110 | 1410 U |
| | 4 | | | | MH35H5 | 859 | 1100 U |
| | ļ | | | | MH35H6 | 1270 | 1370 U |
| | | | | | MH35J1 | 1070 | 1510 U |
| | | - | | | MH35J2 | 729 | 1530 U |
| PB | Chromium | 1 | 0.026 | 0.060 | MH35H9 | 0.62 | 2.9 U |
| PB | Cobalt | 1 | 0.0053 | 0.500 | MH35G7 | 1.4 | 2.8 U |
| 15 | Cobunt | 1 | 0.0055 | 0.500 | MH35G9 | 2.3 | 3.0 U |
|] | | | | | MH35H0 | 1.1 | 2.2 U |
| | · | | | | MH35H8 | 1.1 | 3.4 U |
| | | | | · | MH35H9 | 0.62 | 2.9 U |
| PB | Magnesium | 500 | 1.2 | 2.721 | MH35G7 | 753 | 1380 U |
| LD | wagnesiuiii | 500 | 1.2 | 2./21 | MH35G7 MH35G9 | /5 <i>3</i> 646 | 1380 U 1500 U |
| | | | | | MH35H0 | 791 | 1300 U |
| | | | | | MH35H2 | 1150 | |
| | | | | | MH35H4 | 941 | 1370 U |
| | | | | | | K | 1410 U |
| | | | | | MH35H8 | 1460 | 1680 U |
| | | | | | MH35H9 | 327 | 1460 U |
| | | | | | MH35J1 | 1020 | 1510 U |
| | NT: -11 | 0.5 | 0.012 | 0.500 | MH35J2 | 1040 | 1530 U |
| PB | Nickel | 0.5 | 0.013 | 0.500 | MH35G7 | 0.99 | 1.4 U |
| ı | | | | : | MH35H0 | 1.1 | 1.1 U |
| | | | | | MH35H8 | 1.1 | 1.7 U |
| 777 | 75 / | 600 | | 0.070 | MH35H9 | 0.59 | 1.5 U |
| PB | Potassium | 500 | 5.8 | -8.872 | MH35G5 | 606 | 627 U |
| | | | | | MH35G7 | 498 | 1380 U |
| | | | | | MH35G9 | 514 | 1500 U |
| | | | | | MH35H0 | 504 | 1120 U |
| | | | | | MH35H1 | 817 | 1580 U |
| | | | | | MH35H2 | 729 | ·1370 U |
| | | | • | | MH35H3 | 297 | 638 U |
| | | | | | MH35H4 | 730 | 1410 U |
| 1 | | | | | MH35H6 | 956 | 1370 U |
| | | | | | MH35H8 | 583 | 1680 U |
| | | | | | MH35H9 | 268 | 1460 U |
| | | | | | MH35J0 | 703 | 825 U |
| | • | | | | MH35J1 | 1020 | 1510 U |
| | | | | | MH35J2 | 373 | 1530 U |
| | | | | | MH35J3 | 974 | 1740 U |
| PB | Selenium | 2.5 | 0.036 | 2.500 | MH35G5 | 1.5 | 3.1 U |
| | | | | | MH35G6 | 1.8 | 4.0 U |
| | | | | | MH35G7 | 0.78 | 6.9 U |
| | | | | | MH35G8 | 1.0 | 3.2 U |
| | | | | | MH35G9 | 1.0 | 7.5 U |
| | | | | | MH35H0 | 0.83 | 5.6 U |
| | | | : | | MH35H1 | 1.3 | 7.9 U |
| | [| | | | MH35H2 | 0.83 | 6.9 U |
| | | | | | MH35H3 | 0.92 | 3.2 U |
| | . [| | | | MH35H4 | 0.69 | 7.1 U |
| | | | | | MH35H5 | 1.6 | 5.5 U |
| | + | | | | MH35H6 | 1.1 | 6.9 U |

| Blank | Contam- | CRQL | MDL | Concentration | Associated | Concentration | Qualifier/ |
|--------|------------|---------|---------|---------------|------------------|----------------|-----------------|
| Dialik | inant | (mg/Kg) | (mg/Kg) | Found in | Samples | Found in | Adjustment |
| | | | | Blank (mg/Kg) | | Sample (mg/Kg) | |
| PB | Selenium | 2.5 | 0.036 | 2.500 | MH35H8 | 2.4 | 8.4 U |
| | | | | | MH35H9 | 0.34 | 7.3 U |
| | | | | | MH35J0 | 0.32 | 4.1 U |
| | | | | | MH35J1 | 1.5 | 7.6 U |
| | | | | | MH35J2 | 0.23 | 7.6 U |
| | | | | | MH35J3 | 1.2 | 8.7 U |
| , | | | | | MH35J4 | 0.85 | 3.2 U |
| | 0:1 | 0.5 | 0.0000 | 0.015 | MH35J5 | 0.62 | 3.0 U |
| PB | Silver | 0.5 | 0.0023 | 0.015 | MH35G7 | 0.38 | 1.4 U |
| | | | | | MH35G8 | 0.48 | 0.64 U |
| • | | | | | MH35H1 MH35H8 | 1.4 0.29 | 1.6 U 1.7 U |
| | | | | | MH35H9 | 0.29 | 1.7 U |
| | | | | | MH35J2 | 0.84 | 1.5 U |
| | | | | | MH35J3 | 0.56 | 1.5 U |
| PB | Sodium | 500 | 0.73 | 17.117 | MH35G5 | 26.2 | 627 U |
| 15 | Souldin | 500 | V.73 | 1/.11/ | MH35G6 | 72.1 | 795 U |
| | | | | | MH35G7 | 53.5 | 1380 U |
| | | | | | MH35G8 | 72.2 | 640 U |
| | · | | | | MH35G9 | 38.4 | 1500 U |
| | | ; | | | MH35H0 | 33.9 | 1120 U |
| | | | | | MH35H1 | 44.5 | 1580 U |
| 1 | | | | • | MH35H2 | 53.0 | 1370 U |
| | | | | | MH35H3 | 20.8 | 638 U |
| | • • | | | • | MH35H4 | 73.1 | 1410 U |
| ٠. | | | | | MH35H5 | 102 | 1100 U |
| | | | | | MH35H6 | 78.6 | 1370 U |
| | | | | | MH35H8 | 141 | 1680 U |
| | | | | | MH35H9 | 28.6 | 1460 U |
| | | | | | MH35J0 | 25.2 | 825 U |
| | | | | | MH35J1 | 90.9 | 1510 U |
| | | | | | MH35J2 | 30.5 | 1530 U |
| | | | | | MH35J3 | 88.4 | 1740 U |
| | | | | | MH35J4 | 77.9 | 640 U |
| DD. | (III - 11' | 0.5 | 0.0015 | 0.500 | MH35J5 | 81.2 | 605 U |
| PB | Thallium | 0.5 | 0.0015 | 0.500 | MH35G5 | 0.45 | 0.63 U |
| , | | | | | MH35G6 | 0.64 | 0.79 U |
| | | | | | MH35G7 | 0.12 | 1.4 U |
| | | | | | MH35G8 MH35G9 | 0.31 0.19 | 0.64 U 1.5 U |
| | | | | | MH35H0 | 0.19 | 1.1 U |
| | | | | | MH35H0 MH35H1 | 0.77 | 1.1 U 1.6 U |
| | | | | | MH35H2 | 0.33 | 1.4 U |
| | | | | | MH35H3 | 0.23 | 0.64 U |
| , | | | | | MH35H4 | 0.33 | 1.4 U |
| | | | | | MH35H5 | 0.61 | 1.1 U |
| | | | | • | MH35H6 | 0.41 | 1.4 U |
| | ļ | | | | MH35H8 | 0.070 | 1.7 U |
| | | | | | MH35H9 | 0.017 | 1.5 U |
| | İ | | | | MH35J0 | 0.39 | 0.83 U |
| | | | i | | MH35J1 | 0.31 | 1.5 U |
| | | | İ | | MH35J2 | 0.25 | 1.5 U |
| | | | | | MH35J3 | 0.50 | 1.7 U |
| | | | | | MH35J4 | 0.31 | 0.64 U |
| | | | | | MH35J5 | 0.33 | 0.60 U |

UOS

4. INDUCTIVELY COUPLED PLASMA - INTERFERENCE CHECK SAMPLE (ICP-ICS)

| | The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but <u>not</u> prior to the ICV. | | | | | |
|-----|--|---|--|--|--|--|
| | Yes_X_ | No | | | | |
| | Comments: | None. | | | | |
| | Percent recover was within ± th | ry of the analytes in the ICS solutions were within the range of 80-120% or the result e CRQL. | | | | |
| | Yes | No_X | | | | |
| | Comments: | For Sodium, the ICP-AES Interference Check Sample Results exceeded the True Values by approximately 2.0 times the CRQL, this analysis was repeated with similar results. Results for all samples for Sodium analyses, have already been flagged 'U' due to blank contamination therefore no further qualification is applied due to the ICP-AES ICS result. | | | | |
| . • | Sample results interference wa | for aluminum, calcium, iron, and magnesium were less than the ICSA values or no s noted. | | | | |
| | Yes_X_ | No NA | | | | |
| | Comments: | None. | | | | |
| | Sample results | contain potential false positives and false negatives. | | | | |
| | Yes_X_ | No | | | | |
| | Comments: negatives that re | The following table lists the elements with potential false positives or false esulted in sample qualification, affected samples, and data qualifiers: | | | | |



6.

Comments:

None.

ICP Interferences

| Element | Concentration Found in ICSA Sample (ug/L) | Affected Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-----------|---|--|---|--------------------------|
| Beryllium | 0.36 | MH35G8 MH35J0 | >MDL | J+ |
| Potassium | 494 | MH35G6 MH35G8 MH35H5 MH35J4 MH35J5 | | |
| Thallium | -0.05 | All samples | All concentrations | UJ |

5.

| | | | MH35J5 | | |
|----------------|---------------|-----------------|---|--|---------------------|
| Thallium | -0.05 | | All samples | All concentrations | UJ |
| LABORATO | ORY CONT | FROL SAMI | PLE | | |
| | | | | analyzed with every t group (whichever is n | |
| Yes_X_ | No | | | | |
| Comments: | None. | | | | |
| All results we | ere within co | ontrol limits (| OF 70-130%. | - | |
| Yes_X_ | No | | | | |
| Comments: | None. | | | | |
| FORM 6 & 1 | 2 - DUPLI | CATE SAM | PLE ANALYSIS | S | |
| | | | ned with every tw chever is more fro | enty or fewer samples equent). | of a similar matrix |
| Yes_X_ | No | NA | | | |
| Comments: | None. | | | | |
| The RPDs we | re calculate | d correctly. | | | |
| Yes_X_ | No | NA | | | |

URS Operating Services, Inc.

| For sample concentrations greater than five times the CRQL, RPDs were within 2 | 0% (limits of |
|--|---------------|
| 35% apply for soil/sediments/tailings samples). | |

Yes_X No_ NA_

Comments: None.

For sample concentrations less than five times the CRQL, duplicate analysis results were within the control window of CRQL (absolute difference < CRQL for soils).

Yes_X_ No_ NA___

Comments: None.

7. SPIKE SAMPLE ANALYSIS

A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes X No NA NA

Comments: None.

The percent recoveries (%Rs) were calculated correctly.

Yes_X_ No___ NA___

Comments: None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes___ No_X_

Comments: The following table lists the spike recoveries outside control limits, post digestion

spike recoveries, samples affected, and data qualifiers:

| | Matrix Spike %R | Post-Digestion %R | Samples Affected | Qualifiers |
|----------|--------------------|----------------------|------------------|------------|
| Antimony | 12% | 84% | All samples | J/UJ |
| Selenium | 60% | 63% | | J-/UJ |
| Silver | 6% | 85% | | J/UJ |
| Zinc | 40% | 68% | | J-/UJ |



| A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., |
|---|
| Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less |
| than four times the spike amount added, exception: Ag, Hg). |

| Yes_X_ | No | NA | |
|----------|------|----|--|
| Comments | None | | |

8. ICP SERIAL DILUTION

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

| Yes_X_ | No |
|-----------|-------|
| Comments: | None. |

The serial dilution was without interference problems as defined by the SOW.

Yes___ No_X

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

| Element | % Difference | Samples Affected | Qualifiers |
|-----------|--------------|------------------|------------|
| Arsenic | 22% | All samples | J |
| Beryllium | 28% | * · | |
| Cadmium | 13% | | |
| Chromium | 12% | | |
| Copper | 21% | | • |
| Manganese | 12% | | |
| Nickel | 90% | | |
| Zinc | 34% | | |



10.

12.

Comments:

None.

| 9. | ICP-MS | |
|-----|---------------------------|---|
| | The ICP MS | tune met SOW requirements. |
| | Yes_X_ | No NA |
| | Comments: | The ICP MS instrument was correctly tuned prior to analysis and all tuning criteria were met. |
| | The minimum analyte masse | n number of internal standards were added to the analyses and bracketed the target es. |
| | Yes_X_ | No |
| | Comments: | None. |
| | All percent re | lative intensities were within 60-125%. |
| | Yes_X_ | No |
| | Comments: | None. |
| 10. | REGIONAL | QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC) |
| | Regional QA/ | QC was conducted as initiated by the EPA Region 8. |
| | Yes No | NA <u>X</u> |
| | Comments: | The SDG shows no indication of EPA Region 8 initiating any additional QA/QC. |
| 11. | FORM 10 - I | NTERELEMENT CORRECTION FACTORS FOR ICP |
| | Interelement of | corrections for ICP were reported. |
| | Yes X | No |
| | Comments: | None. |
| 12. | FORM 12 - P | REPARATION LOG |
| | Information of | n the preparation of samples for analysis was reported on Form 12. |
| | Yes_X_ | No |

URS Operating Services, Inc.

13. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes X No__

Comments: None.

14. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
- J+ The associated numerical value is an estimated quantity but the result may be biased high.
- J- The associated numerical value is an estimated quantity but the result may be biased low.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value.

 The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

AA Atomic Absorption

Ag Silver

CCB Continuing Calibration Blank

CCV Continuing Calibration Verification

CFR Code of Federal Regulations
CLP Contract Laboratory Program
CRA CRQL standard required for AA

CRQL Contract Required Quantitation Limit

CRI CRQL standard required for ICP

CV Cold Vapor

EPA U.S. Environmental Protection Agency
GFAA Graphite Furnace Atomic Absorption

Hg Mercury

ICB Initial Calibration BlankICP Inductively Coupled PlasmaICS Interference Check Sample

ICSA Interference Check Sample (Solution A)
ICSAB Interference Check Sample (Solution AB)

ICV Initial Calibration Verification
LCS Laboratory Control Sample

LRA Linear Range Verification Analysis

MDL Method Detection Limit
PDS Post Digestion Spike
QC Quality Control

RPD Relative Percent Difference RPM Regional Project Manager

RSD Percent Relative Standard Deviation

SA Spike Added

SAS Special Analytical Services
SDG Sample Delivery Group
SOW Statement of Work

SR Sample Result

SSR Spiked Sample Result

| Lab Code | ab Code: DATAC Case No.: 40755 | | | No.: _ | SDG | No.: M | 1H35G5 | |
|--------------|--------------------------------|--------------|-----------------|---------|----------------|--------|---------------|---------------|
| Matrix: Soil | | | Lab Sample | ID: 1 | 1030769001 | | | |
| % Solid: | ~. 70 0 | | Date Recei | mod. | 11/03/2010 | | | |
| e SOTIO | S: <u>/9.0</u> | | Date Recei | vea | 11/03/2010 | | | |
| Concent: | ration Units | (ug/L, ug or | mg/kg dry weigh | nt): mg | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | _7 |
| | 7440-36-0 | Antimony | 0.44 | J | N | MS | 1.3 | UJ " |
| | 7440-38-2 | Arsenic | 58.9 | | E | MS | 1 | THE |
| | 7440-39-3 | Barium | 144. | | | MS |] | |
| | 7440-41-7 | Beryllium | 0.25 | J | E | MS | 0.63 | UJ TO |
| | 7440-43-9 | Cadmium | 0.77 | | E | MS | \mathcal{I} | N |
| | 7440-70-2 | Calcium | | | | | | |
| | 7440-47-3 | Chromium | 4.8 | | Е | MS | 17 | TE |
| | 7440-48-4 | Cobalt | 4.0 | | | MS |] | |
| | 7440-50-8 | Copper | 64.9 | | E | MS | 1 | N |
| | 7439-89-6 | Iron | | | | | 1 | |
| | 7439-92-1 | Lead | 254. | | | MS |] | |
| | 7439-95-4 | Magnesium | | | · | | 1 | |
| | 7439-96-5 | Manganese | 406. | | E | MS | 11 | H |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | 1.9 | · | E | MS | I | \mathcal{H} |
| | 7440-09-7 | Potassium | | | | | 1 | |
| | 7782-49-2 | Selenium | 1.5 | J | N | MS | 3.1 | UJT |
| | 7440-22-4 | Silver | 0.95 | | N | MS | 1 1 | 70 |
| | 7440-23-5 | Sodium | | | | | 1 | |
| | 7440-28-0 | Thallium | 0.45 | J | | MS | 0.6 | 30J |
| | 7440-62-2 | Vanadium | 36.5 | | | MS | | |
| | 7440-66-6 | Zinc | 192. | | NE | MS | J- | -11 |
| | 57-12-5 | Cyanide | | | | | | 2/181 |
| | | | | | | | | , , |
| Color Be | efore: BROWN | Clari | ty Before: | | Texture: (| COARSE | | |
| | fter: COLORLE | | ty After: CLEAR | | - Artifacts | : | | |
| | | | -1 | | | | | |
| Comments | s: | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35G5 | |

| | | | | | | | <u></u> | |
|----------|----------------|-----------------------|-----------------|-------------------|-----------|--------------|--------------------|-------|
| Lab Name | : ALS Labora | atory Group | Contract: | EPW09036 | | | | |
| Lab Code | e: DATAC (| Case No.: <u>4075</u> | 5 Mod. Ref. | No.: | SDG No | .: <u>MH</u> | 35G5 | |
| Matrix: | Soil | | Lab Sample | ID: <u>103076</u> | 9001 | | | |
| % Solids | s: <u>79.8</u> | | Date Recei | ved: 11/03/ | 2010 | | | |
| C | Maika | /v.o./T | /lea dans maigh | 1+) • ma/ka | | | | |
| Concentr | acion units | (ug/L, ug OI | mg/kg dry weigh | ic) - mg/ kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 3730 | | | Р | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | ** | | | | | |
| | 7440-43-9 | Cadmium | | | j | | | 7/ |
| | 7440-70-2 | Calcium | 195. | J | | P | 627 | UM |
| | 7440-47-3 | Chromium | | | | | O~ · | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | - | | |
| • | 7439-89-6 | | 53500 | | | р | | |
| | | Iron | 33300 | | - | | | |
| | 7439-92-1 | Lead | 0000 | | | P | | |
| | 7439-95-4 | Magnesium | 2030 | | | | | |
| | 7439-96-5 | Manganese | | · | | | | |
| | 7439-97-6 | Mercury | | , | | | | |
| | 7440-02-0 | Nickel | | | | | 107 | ,, 1 |
| | 7440-09-7 | Potassium | 606. | | | P (| 52 l | U |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | | M |
| | 7440-23-5 | Sodium | 26.2 | J | E | Р (| 527 L | , |
| | 7440-28-0 | Thallium | | | | | 627 627 L 21 | 1 alu |
| | 7440-62-2 | Vanadium | | | | | M | 1814 |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Color Be | fore: ORANGE | : Clarit | y Before: | Text | ture: COA | ARSE | | |
| C-l 75 | ter: YELLOW | | y After: CLEAR | 71 22 + 1 | ifacts: | | | |
| COLOT AT | cer: TEPPOM | Clalic | y Arter. Cuman | ALC. | LLACES | | | |
| Comments | : | | | | | | | |
| E: The | e reported v | alue is estima | ated due to the | presence of | f interf | erenc | э. | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| MH35G6 | |
|--------|--|

| trix: Solids: | | | | | | | | |
|------------------|-------------|--------------|-----------------|--------------|--------------|-------|------------|------|
| Solids: | CO 0 | | Lab Sample | ID: <u>1</u> | .030769002 | | | |
| | 62.9 | | Date Recei | ved: 1 | .1/03/2010 | | | |
| ncentra | tion Units | (ug/L, ug or | mg/kg dry weigh | t): mg | /kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| 7 | 7429-90-5 | Aluminum | | | | | | |
| 7 | 7440-36-0 | Antimony | 0.82 | J | N | MS | 1.6 | UJ |
| 7 | 7440-38-2 | Arsenic | 44.2 | | E | MS | 1.6 | 1 |
| 7 | 7440-39-3 | Barium | 443. | | | MS | | |
| 7 | 7440-41-7 | Beryllium | 0.38 | J | E | MS | 10.79 | 1U A |
| 7 | 7440-43-9 | Cadmium | 0.73 | J | E | MS | 0.79 | WJ |
| 7 | 7440-70-2 | Calcium | | | | | | |
| | 7440-47-3 | Chromium | 4.6 | | E | MS |]] | n |
| 7 | 7440-48-4 | Cobalt | 3.5 | | | MS | _ | رو- |
| 7 | 7440-50-8 | Copper | 35.8 | | E | MS | J | M |
| 7 | 7439-89-6 | Iron | | | | | | |
| 7 | 7439-92-1 | Lead | 372. | | | MS | | |
| 7 | 7439-95-4 | Magnesium | | | | | | 11 |
| 7 | 7439-96-5 | Manganese | 344. | | E | MS |]] | W |
| 7 | 7439-97-6 | Mercury | | | <u> </u> | | <u></u> | -7/ |
| 7 | 7440-02-0 | Nickel | 2.7 | | E | MS | 1 | A |
| 7 | 7440-09-7 | Potassium | | | , | | <u> </u> , | _ |
| [7 | 7782-49-2 | Selenium | 1.8 | J | N | MS | 4,00 | ノユ |
| | 7440-22-4 | Silver | 2.2 | | И | MS | 1 | フ |
| [7 | 7440-23-5 | Sodium | | | | | | |
| | 7440-28-0 | Thallium | 0.64 | J | | MS | 0.1 | 901 |
| [7 | 7440-62-2 | Vanadium | 37.2 | | | MS | 0.7 I | 7 |
| 7 | 7440-66-6 | Zinc | 179. | | NE | MS | 17 - | - / |
| 5 | 57-12-5 | Cyanide | | | | ↓ | | 2/18 |
| | | | | | | | 1 | |
| | | | | | | |] | |
| lor Bef | ore: ORANGE | Clarit | y Before: | | _ Texture: M | EDIUM | | |
| lor Aft | er: BROWN | Clarit | y After: CLEAR | - | _ Artifacts: | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35G6 | |

| rix: | Soil | · | Lab Sample | ID: <u>1</u> | 030769002 | | |
|-------|---------------|--------------|-----------------|---------------|------------|--------|--------------|
| olids | 62.9 | <u>_</u> | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| centr | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 4750 | | | P | 1 |
| | 7440-36-0 | Antimony | | | | |] |
| | 7440-38-2 | Arsenic | | | | |] |
| | 7440-39-3 | Barium | | | | | 1 |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | 1 |
| | 7440-70-2 | Calcium | 854. | | | P | 1 |
| | 7440-47-3 | Chromium | | | | | 1 |
| | 7440-48-4 | Cobalt | | | | | 1 |
| | 7440-50-8 | Copper | | | | | 1 |
| | 7439-89-6 | Iron | 73000 | | D | P | 1 |
| | 7439-92-1 | Lead | | | | |] |
| | 7439-95-4 | Magnesium | 1890 | | | P | 1 |
| - | 7439-96-5 | Manganese | | | | | <u> </u> |
| • | 7439-97-6 | Mercury | | | | | 1 |
| • | 7440-02-0 | Nickel | | | | |] . |
| • | 7440-09-7 | Potassium | 1150 | | | P |] T + |
| • | 7782-49-2 | Selenium | | | | |] ` |
| | 7440-22-4 | Silver | | | | | 1 |
| | 7440-23-5 | Sodium | 72.1 | J | E | P | 795 U |
| | 7440-28-0 | Thallium | | | | | J+ 7950 2/10 |
| | 7440-62-2 | Vanadium | | | | | 7/1 |
| • | 7440-66-6 | Zinc | - | | | | |
| | 57-12-5 | Cyanide | | | **** | | |
| | | | | | | | |
| or Be | efore: ORANGI | E Clari | ty Before: | | Texture: I | MEDIUM | |
| | ter: YELLOW | | ty After: CLEAR | | | | |
| JL AL | THE THE TOTAL | | cy micor. Onm | | | | |

| | MH35G7 | |
|--|--------|--|

| ıb Cod | e: DATAC | Case No.: 407 | Mod. Ref. | No.: _ | SDG 1 | No.: I | 4H35G5 |
|---------|----------------|-----------------|-----------------|--------|--------------|--------|------------------------------|
| atrix: | Soil | | Lab Sample | ID: | 1030769005 | | |
| Solid | s: <u>36.2</u> | | Date Recei | ved: 1 | 11/03/2010 | | |
| oncent: | ration Units | ug/L, ug or | mg/kg dry weigh | t): mg | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] · |
| | 7429-90-5 | Aluminum | | | : | | 1 _ |
| | 7440-36-0 | Antimony | 1.1 | J | N | MS | 12,805 |
| | 7440-38-2 | Arsenic | 36.7 | | E | MS | 11 |
| | 7440-39-3 | Barium | 30.7 | | | MS |] ' |
| | 7440-41-7 | Beryllium | 0.13 | J | E | MS | 1.405 |
| | 7440-43-9 | Cadmium | 0.11 | J | E | MS | 2,805 J 1,405 1,405 |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 5.1 | | E | MS | T |
| | 7440-48-4 | Cobalt | 1.4 | J | | MS | J 2.80 |
| | 7440-50-8 | Copper | 113. | | E | MS | 2.80 |
| | 7439-89-6 | Iron | | | | |] ` |
| | 7439-92-1 | Lead | 136. | | | MS | |
| | 7439-95-4 | Magnesium | | | | | <u></u>]. |
| | 7439-96-5 | Manganese | 156. | | E | MS |]] |
| | 7439-97-6 | Mercury | | | | | |
| • | 7440-02-0 | Nickel | 0.99 | J | E | MS | J 1,4 UJ 6,9 UJ |
| | 7440-09-7 | Potassium | | | | ļ | |
| | 7782-49-2 | Selenium | 0.78 | J | N | MS | 6.90. |
| | 7440-22-4 | Silver | 0.38 | J | N | MS | 1.405 |
| | 7440-23-5 | Sodium | | | | | <u> </u> |
| | 7440-28-0 | Thallium | 0.12 | J | | MS | 1.405 |
| | 7440-62-2 | Vanadium | 27.8 | | . | MS | ↓ |
| | 7440-66-6 | Zinc | 44.1 | | NE | MS | 11- |
| | 57-12-5 | Cyanide | | | | |] 2, |
| | | | | | | | |
| | | | <u></u> | | | 1 | J |
| olor Be | efore: ORANG | E Clari | ty Before: | | Texture: M | EDIUM | [|
| olor A: | fter: COLORL | ESS Clari | ty After: CLEAR | | Artifacts: | | |
| | 5: | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MU35C7 | |

| ab Code: DATAC Case No.: 40755 | | | Mod. Ref. | No.: _ | SDG 1 | No.: 1 | 4H35G5 |
|--------------------------------|-------------|--------------|-----------------|---------|--|----------|-------------------------|
| atrix: | Soil | | Lab Sample | ID: | 1030769005 | | |
| Solids | : 36.2 | | Date Recei | ved: [| 11/03/2010 | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | .t): mg | g/kg | | |
| | CAS No. | Analyte | Concentration | С | . Q | М | |
| | 7429-90-5 | Aluminum | 2020 | | | Р | 1 |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | , | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1110 | | | P | 1380 U |
| | 7440-47-3 | Chromium | | | | | _ |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 397000 | | D | P | _ |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 753. | J | | P | 1380 U |
| | 7439-96-5 | Manganese | | | | ļ | _ |
| | 7439-97-6 | Mercury | | | | | _ |
| | 7440-02-0 | Nickel | | | | | 1380 U 1380 U 2/1 |
| | 7440-09-7 | Potassium | 498. | J | | P | 13800 |
| | 7782-49-2 | Selenium | | | , | | |
| | 7440-22-4 | Silver | | | | <u> </u> | 100 |
| | 7440-23-5 | Sodium | 53.5 | J | E | P | 1380 U |
| | 7440-28-0 | Thallium | | | | | را م |
| | 7440-62-2 | Vanadium | | | and the second s | | 7/1 |
| | 7440-66-6 | Zinc | | | | _ | _ |
| | 57-12-5 | Cyanide | | | | | _ |
| | | | | | | | 4 |
| | | | | | | | J |
| olor Be | fore: ORANG | E Clarit | cy Before: | | Texture: M | EDIUN | 4 |
| olor Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts | : | |
| • | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35G8 | |

| | | | | | | MH35 | | |
|--------------------|--------------|----------------|------------------|--------------------------------|-----------|-----------|-----------------|---------------|
| Lab Name | : ALS Labora | tory Group | Contract: | EPW090 | 336 | | | |
| Lab Code | : DATAC C | Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35G5 | | | | |
| Matrix: | Soil | <u>-</u> | Lab Sample | ID:] | 103076900 | 6 | | |
| % Solids | : 78.1 | | Date Recei | ved: | 11/03/201 | 0 | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): mạ | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | \mathcal{T} |
| | 7440-36-0 | Antimony | 0.14 | J | N | MS | 1,30T T | |
| | 7440-38-2 | Arsenic | 11.6 | | Ε | MS | J | 12 |
| | 7440-39-3 | Barium | 78.8 | | | MS |] | U |
| | 7440-41-7 | Beryllium | 0.66 | | E | MS | JJ | 7 |
| | 7440-43-9 | Cadmium | 0.42 | Ĵ | E | MS | 0.6405 | - ' |
| | 7440-70-2 | Calcium | | | | | _ | 4. |
| | 7440-47-3 | Chromium | 6.2 | | E | MS | I | N |
| | 7440-48-4 | Cobalt | 6.5 | | | MS | | |
| | 7440-50-8 | Copper | 65.0 | | E | MS | II | N |
| | 7439-89-6 | Iron | | | | | | |
| | 7439-92-1 | Lead | 145. | | | MS | | |
| | 7439-95-4 | Magnesium | | | | | | |
| | 7439-96-5 | Manganese | 839. | | DE | MS | I | 11 |
| | 7439-97-6 | Mercury | | | | | | n |
| | 7440-02-0 | Nickel | 4.2 | | E | MS |] 🕇 | 71 |
| | 7440-09-7 | Potassium | | | | | | 7 |
| | 7782-49-2 | Selenium | 1.0 | J | N | MS | 3.2UJ 0.64UJ | 7 |
| | 7440-22-4 | Silver | 0.48 | J | И | MS | 0.6403 | - |
| | 7440-23-5 | Sodium | | | | | 0,64 03 | <u> </u> |
| | 7440-28-0 | Thallium | 0.31 | J | | MS | 0,64 0 | • |
| | 7440-62-2 | Vanadium | 52.2 | | | MS | | 2 |
| | 7440-66-6 | Zinc | 145. | | NE | MS | 13- | 1 |
| | 57-12-5 | Cyanide | | | | | J- 2/1 | 8/11 |
| | | | | | | |] | |
| Color Be | fore: ORANGE | Clari | ty Before: | | Textur | e: MEDIUM | <u> </u> | |
| Color Af | ter: COLORLE | ESS Clari | ty After: CLEAR | | _ Artifa | cts: | | |
| Comments E: The | | ralue is estir | mated due to the | prese | ence of i | nterferer | ice. | |
| | . reported v | | | 1 | | | | |

INORGANIC ANALYSIS DATA SHEET

| MH35G8 | |
|--------|--|
| | |

| , C.A. | o• ከሽሞሽሮ (| Case No.: 407! | 55 Mod. Ref. | No. • | SDG | No. • N | 1H35G5 |
|--------|------------------------|-------------------|------------------------|----------------|-------------|-------------|----------|
| Cou | e. DATAC (| Lase No.: 407. | | | | no <u>-</u> | <u> </u> |
| rix: | Soil | | Lab Sample | ID: 10 | 030769006 | | |
| Solida | s: <u>78.1</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| cent: | ration Units | (ua/L. ua or | mg/kg dry weigh | ıt): ma | ′ka | | |
| | CAS No. | Analyte | Concentration | c | | М |] |
| | | | <u></u> | | | P | |
| | 7429-90-5 | Aluminum | 8370 | | | P | - |
| | 7440-36-0 | Antimony | | | | | - |
| | 7440-38-2 7440-39-3 | Arsenic Barium | | | | + | 1 |
| | 7440-39-3 | Beryllium | | | | | 1 |
| | 7440-41-7 | Cadmium | | - | | | 1 |
| | 7440-43-9 | Calcium | 1230 | | | P | 1 |
| | 7440-70-2 | Chromium | 1230 | | | +- | 1 |
| | 7440-48-4 | Cobalt | | | | | 1 |
| | 7440-50-8 | Copper | . 11 | | | | 1 |
| | 7439-89-6 | Iron | 34800 | | | P | 1 |
| | 7439-92-1 | Lead | 31005 | | | | 1 |
| | 7439-95-4 | Magnesium | 1460 | | | P | 1 |
| | 7439-96-5 | Manganese | | | | | 1 |
| | 7439-97-6 | Mercury | | | | | 1 |
| | 7440-02-0 | Nickel | | | | | 1 - |
| | 7440-09-7 | Potassium | 902. | | | P | J+ 6400 |
| | 7782-49-2 | Selenium | · · · · · · · | | • | | 1 |
| | 7440-22-4 | Silver | | | | | 1 |
| | 7440-23-5 | Sodium | 72.2 | J | E | P | 6400 |
| | 7440-28-0 | Thallium | | | | | 9/ |
| | 7440-62-2 | Vanadium | | | | | ~/ |
| | 7440-66-6 | Zinc | | | | | 1 |
| | 57-12-5 | Cyanide | | | | | |
| | | | 3,449.44 | | | | |
| am Di | fore ORANG | . Clari | ty Before: | | Texture: (| TOBRSE | ı |
| OT DE | efore: ORANGE | Crarr | rA perore. | | - Texture. | JOHNOL | |
| or Ai | fter: YELLOW | Clari | ty After: <u>CLEAR</u> | | Artifacts | : | |
| nents | 3 : | | | | | | |
| | | zalue is ostin | nated due to the | nreger | nce of inte | rferen | ce. |

| | | | | | | MH350 | 59 |
|--------------------|--------------|----------------|---------------------------------------|-------|----------|------------|--|
| Lab Name | : ALS Labora | atory Group | Contract: I | EPW09 | 036 | | |
| Lab Code | : DATAC C | Case No.: 4075 | Mod. Ref. | No.: | | SDG No.: M | H35G5 |
| Matrix: | Soil | | Lab Sample | ID: | 10307690 | 07 | |
| % Solids | : 33.3 | | Date Recei | ved: | 11/03/20 | 10 | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): m | ıg/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 1.8 | J | N | MS | 3.00 T 1.50 T 1.50 T 1.50 T 1.50 T |
| | 7440-38-2 | Arsenic | 24.5 | | E | MS | T T |
| | 7440-39-3 | Barium | 36.1 | | **** | MS | 7 |
| | 7440-41-7 | Beryllium | 0.74 | J | E | MS | 1,505 |
| | 7440-43-9 | Cadmium | 1.2 | J | E | MS | 1.50T |
| | 7440-70-2 | Calcium | · · · · · · · · · · · · · · · · · · · | | | | // |
| | 7440-47-3 | Chromium | 6.1 | | E | MS | J The |
| | 7440-48-4 | Cobalt | 2.3 | | | MS | 3,00 |
| | 7440-50-8 | Copper | 147. | | E | MS | I The |
| | 7439-89-6 | Iron | | | ~~~~ | | ` |
| | 7439-92-1 | Lead | 773. | | | MS | |
| | 7439-95-4 | Magnesium | ., | | | | , , |
| | 7439-96-5 | Manganese | 489. | | E | MS | J |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 2.0 | | E | MS | I |
| | 7440-09-7 | Potassium | | | | | |
| | 7782-49-2 | Selenium | 1.0 | J | N | MS | 17,5UJ |
| | 7440-22-4 | Silver | 8.5 | | N | MS | 1 7 |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.19 | J | | MS | 1.50] |
| | 7440-62-2 | Vanadium | 34.0 | | | MS | |
| | 7440-66-6 | Zinc | 465. | | NE | MS | J- / |
| | 57-12-5 | Cyanide | | | | | J 7.50J 7.50J 1.50J J-2/18 |
| | | | | | | | |
| Color Be | fore: BROWN | Clari | cy Before: | | Textu | re: MEDIUM | |
| Color Af | ter: BROWN | Clari | ty After: <u>CLEAR</u> | | Artifa | acts: | |
| Comments E: The | • | ralue is estim | nated due to the | pres | ence of | interferen | ce. |

INORGANIC ANALYSIS DATA SHEET

| ab Code | e: DATAC (| Case No.: 407. | 55 Mod. Ref. | No.: | SDG | No.: M | IH35G5 |
|---------|--------------|----------------|------------------|---------------|--------------|--------|-------------------------|
| atrix: | | | Lab Sample | | | _ | |
| | | | _ | _ | | | |
| Solids | 33.3 | <u>.</u> | Date Recei | ved: <u>1</u> | .1/03/2010 | | |
| oncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 3850 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | • |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1390 | | | P | 1500 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 218000 | | D | P | |
| | 7439-92-1 | Lead | | | | | 1500 V |
| | 7439-95-4 | Magnesium | 646. | J | | P | 1500 U |
| | 7439-96-5 | Manganese | | | • | |] |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | |] . |
| | 7440-09-7 | Potassium | 514. | J | | P | 1500 U 1500 U 2/1 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | |
| | 7440-23-5 | Sodium | 38.4 | J | E | P | 1500 U |
| | 7440-28-0 | Thallium | | | | | |
| | 7440-62-2 | Vanadium | | | | | 2/1 |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | | |
| olor Be | efore: RED | Clari | ty Before: | | _ Texture: N | 4EDIUM | |
| olor Ai | ter: YELLOW | Clari | ty After: CLEAR | | Artifacts | : | |
| mments | | | | | | | |
| | | | mated due to the | | : | | |

INORGANIC ANALYSIS DATA SHEET

| Lab Sample ID: 1030769008 11/03/2010 1 | | | Case No.: <u>4075</u> | | | SDG N | _ | |
|--|--------|----------------|-----------------------|-----------------|------|------------|---------------|-------------|
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 7440-36-0 Antimony 2.3 N MS 7440-38-2 Arsenic 23.2 E MS 7440-41-7 Beryllium 0.37 J E MS 7440-41-7 Beryllium 0.37 J E MS 7440-40-2 Calcium 7440-40-3 Chromium 4.0 E MS 7440-48-4 Cobalt 1.1 J MS 7440-50-8 Copper 112. E MS 7439-95-1 Magnesium 7439-95-1 Magnese 239. E MS 7439-97-6 Mercury 7440-00-7 Potassium 7740-02-0 Nickel 1.1 E MS 7440-00-7 Potassium 7740-22-4 Silver 3.9 N MS 7440-22-4 Silver 3.9 N MS 7440-22-5 Cyanide 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide Texture: MEDIUM | trix: | Soil | | Lab Sample | TD: | 1030769008 | | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum | Solids | s: <u>44.8</u> | | Date Recei | ved: | 11/03/2010 | - | |
| 7429-90-5 Aluminum 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 46.5 7440-41-7 Beryllium 0.37 J E MS 7440-42-9 Cadmium 7440-47-3 Chromium 4.0 E MS 7440-47-3 Chromium 4.0 E MS 7440-50-8 Copper 112. E MS 7439-98-6 Iron 7439-92-1 Lead 7439-95-6 Manganese 7439-97-6 Mercury 7440-22-0 Nickel 7440-22-0 Nickel 7440-22-4 Silver 7440-23-5 Sodium 7440-28-0 Thallium 7440-28-0 Thallium 7440-28-0 Thallium 7140-28-0 Clarity Before: Texture: MEDIUM | ncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | t):r | ng/kg | | |
| Taylor T | | CAS No. | Analyte | Concentration | С | Q | | |
| Taylor T | | 7429-90-5 | Aluminum | | | | | 70 |
| T440-47-3 Chromium | | 7440-36-0 | Antimony | 2.3 | | И | MS | I n |
| T440-47-3 Chromium | | 7440-38-2 | Arsenic | 23.2 | | E | MS |]] |
| T440-47-3 Chromium | | 7440-39-3 | Barium | 46.5 | | | MS |] |
| T440-47-3 Chromium | | 7440-41-7 | Beryllium | 0.37 | J | E | MS | 1,105 |
| T440-47-3 Chromium | | 7440-43-9 | Cadmium | 2.4 | | E | MS |]] |
| 7439-89-6 | | 7440-70-2 | Calcium | | | | |] |
| 7439-89-6 | | 7440-47-3 | Chromium | 4.0 | | E | MS | J |
| 7439-89-6 | | 7440-48-4 | Cobalt | 1.1 | J | | MS | 2.20 |
| 7439-89-6 | | 7440-50-8 | Copper | 112. | | E | MS |] [|
| 7439-95-4 Magnesium 7439-96-5 Manganese 239. E MS 7439-97-6 Mercury 7440-02-0 Nickel 1.1 E MS 7440-09-7 Potassium 7782-49-2 Selenium 0.83 J N MS 7440-22-4 Silver 3.9 N MS 7440-23-5 Sodium 7440-28-0 Thallium 0.11 J MS 7440-62-2 Vanadium 31.7 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide Or Before: RED Clarity Before: Texture: MEDIUM | | 7439-89-6 | Iron | | | | | |
| 7439-96-5 Manganese 239. E MS T 7439-97-6 Mercury B 1.1 E MS I.I U. 7440-02-0 Nickel 1.1 E MS I.I U. 7440-09-7 Potassium 0.83 J N MS 5,6 U 7440-22-4 Silver 3.9 N MS J III U. J 7440-23-5 Sodium Sodium MS J.I U. III U. J MS J.I U. III U. J J.I U. III U. J J.I U. J J.I U. J J.I U. J.I U. J J.I U. J J.I U. <t< td=""><td></td><td>7439-92-1</td><td>Lead</td><td>457.</td><td></td><td></td><td>MS</td><td></td></t<> | | 7439-92-1 | Lead | 457. | | | MS | |
| T439-97-6 Mercury | | 7439-95-4 | Magnesium | | | | | 1 |
| T439-97-6 Mercury | | 7439-96-5 | Manganese | 239. | | E | |]] |
| 7440-23-5 Sodium 7440-28-0 Thallium 0.11 J MS 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide Z or Before: RED Clarity Before: Texture: MEDIUM | | 7439-97-6 | Mercury | | | | |] |
| 7440-23-5 Sodium 7440-28-0 Thallium 0.11 J MS 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide 2 or Before: RED | | 7440-02-0 | Nickel | 1.1 | | E | MS |] [1] 03 |
| 7440-23-5 Sodium 7440-28-0 Thallium 0.11 J MS 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide 2 or Before: RED | | 7440-09-7 | Potassium | | | | | <u>.</u> |
| 7440-23-5 Sodium 7440-28-0 Thallium 0.11 J MS 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide Z or Before: RED Clarity Before: Texture: MEDIUM | | 7782-49-2 | Selenium | 0.83 | J | N | MS | 5,6U |
| 7440-23-5 Sodium 7440-28-0 Thallium 0.11 J MS 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide 2 or Before: RED | | 7440-22-4 | Silver | 3.9 | | N | MS | 丁 |
| 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide | | 7440-23-5 | Sodium | | | | | |
| 7440-62-2 Vanadium 31.7 MS 7440-66-6 Zinc 1040 DNE MS 57-12-5 Cyanide | | 7440-28-0 | Thallium | 0.11 | J | | MS | 1.101 |
| or Before: RED Clarity Before: Texture: MEDIUM | | 7440-62-2 | Vanadium | 31.7 | | | MS | |
| or Before: RED Clarity Before: Texture: MEDIUM | | 7440-66-6 | Zinc | 1040 | | DNE | MS |]] - |
| | | 57-12-5 | Cyanide | | | | - | 21 |
| | | | | | | | |] |
| C. C. C. C. C. C. C. C. C. C. C. C. C. C | or Be | efore: RED | Clarit | y Before: | | Texture: M | EDIUM | |
| or After: YELLOW Clarity After: CLEAR Artifacts: | or A | fter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | |

| ri v • | Soil | - | Lab Sample | ID: | 1030769008 | | |
|---------------|--------------|--------------|-------------------|--------|------------|------------------|------------|
| | | | | | | | |
| Solids | : 44.8 | | Date Recei | ved: | 11/03/2010 | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | .t): n | ng/kg | | _ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 4670 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | _ |
| | 7440-39-3 | Barium | | | | | _ |
| | 7440-41-7 | Beryllium | | | | | _ |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1130 | | | P | |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 442000 | | D | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 791. | | | P | 1120 |
| - • | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | 1120 |
| | 7440-02-0 | Nickel | | | | | |
| | 7440-09-7 | Potassium | 504. | J | L | P |] 1120 6 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | |
| | 7440-23-5 | Sodium | 33.9 | J | E | P | 1/20 |
| | 7440-28-0 | Thallium | | | | | 1120 |
| | 7440-62-2 | Vanadium | | | | | $_{\perp}$ |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | _!, | | • | | | |
| olor Be | fore: RED | Clarit | y Before: | | Texture | : MEDIU | <u></u> |
| alar 71f | ter: YELLOW | Clarit | y After: CLEAR | | Artifac | ts: | |
| OTOT WI | .cer. iendow | Crarre | y micci. Children | | | - - - | |
| omments | . • | | | | | | |

INORGANIC ANALYSIS DATA SHEET

| ab Cod | e: <u>DATAC</u> (| Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH3 | | | IH35G5 |
|--------|-------------------|----------------|------------------|-----------------------------|--------------|--------|-------------------------|
| trix: | Soil | | Lab Sample | ID: <u>1</u> | 030769009 | | |
| 0-1:4 | a. 21 <i>6</i> | | Date Recei | ved· 1 | 1/03/2010 | | |
| Solia | s: <u>31.6</u> | | Date Recei | vea | 17 037 2010 | | |
| ncent | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 3,2UT 1,6UT 1,6UT |
| | 7440-36-0 | Antimony | 0.46 | J | N | MS | 3,201 |
| | 7440-38-2 | Arsenic | 57.5 | | E | MS |]] 7 |
| | 7440-39-3 | Barium | 200. | | | MS |] |
| | 7440-41-7 | Beryllium | 1.1 | J | E | MS | 1.605 |
| | 7440-43-9 | Cadmium | 1.1 | J | E | MS | 1605 |
| | 7440-70-2 | Calcium | | | | | 2 |
| | 7440-47-3 | Chromium | 11.9 | | E | MS | I K |
| | 7440-48-4 | Cobalt | 23.7 | | | MS | |
| | 7440-50-8 | Copper | 250. | | E | MS | J |
| | 7439-89-6 | Iron | | | | | 1 |
| | 7439-92-1 | Lead | 1460 | | D | MS | |
| | 7439-95-4 | Magnesium | | | | | JM |
| | 7439-96-5 | Manganese | 2360 | | DE | MS | 1 T |
| | 7439-97-6 | Mercury | | | | | 1 ~ |
| | 7440-02-0 | Nickel | 12.3 | | E | MS | |
| | 7440-09-7 | Potassium | | | | | 7,90 I |
| | 7782-49-2 | Selenium | 1.3 | J | N | MS | 17,901 |
| | 7440-22-4 | Silver | 1.4 | Ĵ | N | MS | 1.603 |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.77 | J | | MS | 1.605 |
| | 7440-62-2 | Vanadium | 62.0 | | | MS |] |
| | 7440-66-6 | Zinc | 378. | | NE | MS | 15- 7 |
| | 57-12-5 | Cyanide | | | ··· | | J- 2/1 |
| | 0, 22 | | | | | | ~ 1 |
| | | | | | | | |
| lor B | efore: BLACK | .Clari | ty Before: | | Texture: 1 | MEDIUM | i |
| | | | ty After: CLEAR | | | | |
| TOT A | fter: YELLOW | CTall | cy arcer. Onean | | | | |
| mment | | | | | | | |
| | | ralne ie estir | mated due to the | prese | ence of inte | rferen | ice. |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35H1 | |

| ab Code | e: DATAC C | Case No.: <u>4075</u> | Mod. Ref. | | | No.: M | H35G5 |
|-------------------|----------------|-----------------------|------------------|--|------------------|------------|----------------------|
| Matrix: | Soil | | Lab Sample | ID: <u>1</u> | 030769009 | | <u>-</u> |
| Solids | s: <u>31.6</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| | | | | | | | |
| Concenti | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | /kg | | • |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 8140 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1940 | | | P | |
| | 7440-47-3 | Chromium | | | *** | | |
| | 7440-48-4 | Cobalt | | | | _ | |
| | 7440-50-8 | Copper | | | 1 | | |
| | 7439-89-6 | Iron | 65400 | - | | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 2260 | | | P | , |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | · |
| | 7440-02-0 | Nickel | 017 | _ | | P | ITONI) |
| | 7440-09-7 | Potassium | 817. | J | | P | 15800 |
| | 7782-49-2 | Selenium | | | ·· | | - |
| | 7440-22-4 | Silver | | J | E | P | 1580 U |
| | 7440-23-5 | Sodium | 44.5 | U | | <u> </u> | 1580 U 1580 U 2/18/1 |
| | 7440-28-0 | Thallium | | | | | 2/18/1 |
| | 7440-62-2 | Vanadium Zinc | | - | | | 1 |
| | 7440-66-6 | Cyanide | | - | | | |
| | 57-12-5 | Cyanitoe | | | | | |
| | | | | | | | |
| | | | <u> </u> | <u></u> | | | 1 |
| Color Be | efore: BROWN | Clarit | ty Before: | | Texture: | MEDIUM | |
| | fter: YELLOW | | ty After: CLEAR | | - _ Artifacts | 3 : | |
| 7 | | | | | | | |
| Comment: E: Th | | value is estim | nated due to the | prese | nce of inte | erferen | ce. |

INORGANIC ANALYSIS DATA SHEET

| .b Code | e: DATAC C | Case No.: 4075 | Mod. Ref. | No.: | SDG N | o.: <u>r</u> | MH35G5 |
|---------|----------------|----------------|-----------------|------|---|--------------|-------------------------------|
| trix: | Soil | | Lab Sample | ID: | 1030769010 | | |
| Solids | s: <u>36.4</u> | | Date Recei | ved: | 11/03/2010 | | |
| ncenti | cation Units | (ug/L, ug or | mg/kg dry weigh | t):n | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 0.65 | J | N | MS | 12.7U] |
| | 7440-38-2 | Arsenic | 15.2 | | E | MS | 1'4 |
| | 7440-39-3 | Barium | 71.6 | | | MS | 1 |
| | 7440-41-7 | Beryllium | 0.33 | J | E | MS | 2.7 U I I I U J I 4 U J |
| | 7440-43-9 | Cadmium | 0.58 | J | E | MS | 1,405 |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 6.4 | | E | MS | \mathbb{I} |
| | 7440-48-4 | Cobalt | 6.8 | | | MS | T M |
| | 7440-50-8 | Copper | 124. | | E | MS | J " |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 341. | | | MS | |
| | 7439-95-4 | Magnesium | | | | |] |
| • • | 7439-96-5 | Manganese | 2010 | | DE | MS | J A |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 2.2 | | E | MS |]] |
| | 7440-09-7 | Potassium | | | | | |
| | 7782-49-2 | Selenium | 0.83 | J | N | MS | J 76.9 UJ |
| | 7440-22-4 | Silver | 4.0 | | N | MS | 7 |
| | 7440~23~5 | Sodium | | | | | 1.405 |
| | 7440-28-0 | Thallium | 0.33 | J | | MS | 1,401 |
| | 7440-62-2 | Vanadium | 27.3 | | | MS | _ |
| | 7440-66-6 | Zinc | 242. | | NE | MS |]] – |
| | 57-12-5 | Cyanide | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | J- 2/ |
| | | <u> </u> | | | | | · |
| olor Be | efore: BROWN | Clarit | y Before: | | Texture: MF | DIUM | |
| | ter: YELLOW | | y After: CLEAR | | | | |
| OTOL AI | CAT. IPPTOM | CTall | y Arcer. Chear | | ALCITACES. | | |
| omments | • • | | | | | | |

| Lab Cod | e: DATAC | Case No.: <u>407</u> | 55 Mod. Ref. | No.: _ | SDG 1 | No.: N | 4H35G5 |
|---------|----------------|----------------------|-----------------|--|---------------------------------------|----------|----------------------|
| Matrix: | Soil | | Lab Sample | : ID: 1 | 1030769010 | | |
| % Solid | s: <u>36.4</u> | | Date Recei | ved: 1 | 1/03/2010 | | |
| Concent | ration Unit | s (ug/L, ug or | mg/kg dry weigh | nt): mg | ŋ/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | 4940 | | | P | |
| | 7440-36-0 | Antimony | | | | | 1 |
| | 7440-38-2 | Arsenic | | | · · · · · · · · · · · · · · · · · · · | | |
| | 7440-39-3 | Barium | | | | | 1 |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | |] |
| | 7440-70-2 | Calcium | 1330 | | | P | 13700 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 159000 | | D | P | |
| | 7439-92-1 | Lead | | | | | 13700 |
| | 7439-95-4 | Magnesium | 1150 | | | P | 13700 |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | 127217 |
| | 7440-09-7 | Potassium | 729. | J | | P | 13100 |
| | 7782-49-2 | Selenium | | | | _ | |
| | 7440-22-4 | Silver | | | | <u> </u> | 1270117 |
| | 7440-23-5 | Sodium | 53.0 | J | E | P | 13/00 |
| | 7440-28-0 | Thallium | | | | | 1370 0 7 1370 0 7 |
| | 7440-62-2 | Vanadium | | | | | |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | - |
| | | : | | | | |] . |
| Color B | efore: BROWN | N Clari | ty Before: | | Texture: M | EDIUM | <u> </u> |
| Color A | fter: YELLOW | W Clari | ty After: CLEAR | | Artifacts: | : | |
| | | | | | | | |
| Comment | s: | | | | | | |

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. мнз5нз

| rix: | Soil | | Lab Sample | ID: | 1030769011 | | | |
|----------|--------------|--------------|--|----------|------------|--------------|----------------------------|---------|
| olids | : 78.4 | | Date Recei | ved: | 11/03/2010 | | | _ |
| centr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): m | g/kg | | - | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | ****** | 1 _ | |
| | 7440-36-0 | Antimony | 0.20 | Ĵ | N | MS | 1.36 | 77 |
| | 7440-38-2 | Arsenic | 26.2 | | E | MS | 1 | - |
| | 7440-39-3 | Barium | 51.8 | | | MS |] . | |
| | 7440-41-7 | Beryllium | 0.23 | J | E | MS | 0.64 | o_{-} |
| | 7440-43-9 | Cadmium | 0.51 | J | E | MS | 1.3 L 5 0.64 0.64 | U. |
| | 7440-70-2 | Calcium | | | | | | |
| | 7440-47-3 | Chromium | 9.1 | | E | MS | I | a |
| | 7440-48-4 | Cobalt | 4.3 | | | MS | l | m |
| | 7440-50-8 | Copper | 42.8 | | E | MS |]] | ,, , |
| | 7439-89-6 | Iron | | | | | _ | |
| | 7439-92-1 | Lead | 294. | | | MS | | |
| | 7439-95-4 | Magnesium | | | | | | |
| - | 7439-96-5 | Manganese | 624. | | DE | MS | \mathcal{I} | |
| | 7439-97-6 | Mercury | | | | | J 3,24 | |
| | 7440-02-0 | Nickel | 4.1 | | Е | MS | 17 | 7. |
| | 7440-09-7 | Potassium | | | | | | · 16 |
| | 7782-49-2 | Selenium | 0.92 | J | N | MS | 3,20 | 1 3 |
| | 7440-22-4 | Silver | 0.88 | | N | MS |] 4 | |
| | 7440-23-5 | Sodium | | | | | <u> </u> | |
| , | 7440-28-0 | Thallium | 0.23 | J | | MS | 0.64 | U. |
| _ | 7440-62-2 | Vanadium | 29.1 | | | MS | 0.64 | |
| • | 7440-66-6 | Zinc | 145. | | NE | MS | 14- | |
| | 57-12-5 | Cyanide | | | | | _ | 21 |
| | | | | | | | _ | " |
| | | | | <u> </u> | | | _ | |
| | | | | | | | | |
| lor Be | fore: YELLOW | V Clari | ty Before: | | Texture: | MEDIUM | | _ |
| lar 71-f | tare COTODII | ree Clari | ty After: CLEAR | | Artifacts | : | | |
| TOT WI | rer: COPOKPI | CTGTT | cy Arcer. ChiAk | | | | | |

| Lab Name | : ALS Labora | atory Group | Contract: 1 | EPW0903 | 6 | | |
|----------|--------------|----------------|------------------|--------------------------------|------------|--------------|---------------------------|
| Lab Code | e: DATAC | Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35G5 | | | MH35G5 |
| Matrix: | atrix: Soil | | | ID: <u>10</u> | 30769011 | | |
| % Solids | Solids: 78.4 | | | ved: <u>11</u> | /03/2010 | | <u> </u> |
| Concenti | cation Units | (ug/L, ug or | mg/kg dry weigh | it): mg/ | kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 9330 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | ,,,, | | |
| | 7440-41-7 | Beryllium | | | | | 1 |
| | 7440-43-9 | Cadmium | | | | _ | |
| | 7440-70-2 | Calcium | 1710 | | | P | |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | · | | |
| | 7440~50-8 | Copper | | | · | | - |
| | 7439-89-6 | Iron | 18200 | | | P | 4 |
| | 7439-92-1 | Lead | | ļ | | | - |
| | 7439-95-4 | Magnesium | 8680 | | | P | |
| | 7439-96-5 | Manganese | | | | - | - |
| | 7439-97-6 | Mercury | | <u> </u> | | | 1 |
| | 7440-02-0 | Nickel | | | | | 638 U TM 638 U TM 2/18/10 |
| | 7440-09-7 | Potassium | 297. | J | | P | 6300 |
| | 7782-49-2 | Selenium | | <u> </u> | | | |
| | 7440-22-4 | Silver | | | | | 100 n 76 |
| | 7440-23-5 | Sodium | 20.8 | J | E | P | 6380 |
| | 7440-28-0 | Thallium | | | | | 2/18/0 |
| | 7440-62-2 | Vanadium | | | | | |
| | 7440-66-6 | Zinc | | | | | _ |
| | 57-12-5 | Cyanide | | | | | |
| - | | | | | | | |
| | | | | | | |] |
| | | | _ | | | 202000 | |
| Color Be | efore: ORANG | E Clari | ty Before: | | Texture: | COARSE | |
| Color At | fter: YELLOW | Clari | ty After: CLEAR | | Artifacts | : | |
| Comments | . | | | | | | |
| | | malna ie aetir | mated due to the | presen | ce of inte | rferer | ice. |
| E: IN | e rehorred | vaine is esti | naced due to the | Dr. 02011 | 01 11100 | | |
| | | | | | | | |

| | EPA | SAMPLE | NO. |
|---|-----|--------|-----|
| Г | | мн35н4 | |

| ab Cod | le: <u>DATAC</u> | Case No.: <u>4075</u> | Mod. Ref. | No.: _ | SDG | No.: M | 1H35G5 |
|--------|------------------|-----------------------|-----------------|--|-------------|--------|--------|
| atrix: | Soil | | Lab Sample | ID: 10 | 030769012 | | |
| Solid | ls: 35.4 | | Date Recei | ved: 1 | 1/03/2010 | | |
| | | | | | | | |
| oncent | ration Units | (ug/L, ug or | mg/kg dry weigh | it): mg/ | /kg | | |
| | CAS No. | Analyte | Concentration | С | | М | Ì |
| | 7429-90-5 | Aluminum | | | | | - |
| | 7440-36-0 | Antimony | 0.74 | J | N | MS | 2.80] |
| | 7440-38-2 | Arsenic | 20.5 | | E | MS | 7 |
| | 7440-39-3 | Barium | 61.9 | | | MS | ~ |
| | 7440-41-7 | Beryllium | 0.41 | J | E | MS | 1,405 |
| | 7440-43-9 | Cadmium | 0.50 | J | E | MS | 1.405 |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 4.3 | | E | MS | 17 7 |
| | 7440-48-4 | Cobalt | 6.0 | | | MS | |
| | 7440-50-8 | Copper | 84.0 | | E | MS |] J n |
| | 7439-89-6 | Iron | | | | |] |
| | 7439-92-1 | Lead | 362. | | | MS |] |
| | 7439-95-4 | Magnesium | | | | | |
| | 7439-96-5 | Manganese | 1910 | | DE | MS | J Z |
| | 7439-97-6 | Mercury | | | | | _ |
| | 7440-02-0 | Nickel | 1.6 | | E | MS | J 7 |
| | 7440-09-7 | Potassium | | | | | |
| | 7782-49-2 | Selenium | 0.69 | J | N | MS | 7.105 |
| | 7440-22-4 | Silver | 2.3 | | N | MS | I I |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.33 | J | | MS | 1,405 |
| | 7440-62-2 | Vanadium | 29.7 | | | MS | 7 |
| | 7440-66-6 | Zinc | 240. | · | NE . | MS · | J- 2/1 |
| | 57-12-5 | Cyanide | | <u> </u> | | | 211 |
| | | | | | | - | |
| | | | | LL | | | _ |
| olor B | Before: BROWN | Clari | ty Before: | | Texture: N | 4EDIUM | |
| olor A | After: YELLOW | Clari | ty After: CLEAR | | Artifacts | : | |
| | | | | | _ | | |
| omment | | | | | nce of inte | | |

| Lab Code | e: DATAC C | Case No.: 4075 | Mod. Ref. | No.: | SD | G No.: | мн35G5 |
|----------|----------------|--|------------------|--|---------------------------------------|----------|-------------|
| Matrix: | Soil | | Lab Sample | ID: | 1030769012 | | |
| g Solids | s: <u>35.4</u> | | Date Recei | ved: | 11/03/2010 | | |
| Concenti | ration Units | (ug/L, ug or | mg/kg dry weigh | it): 1 | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | 7 |
| | 7429-90-5 | Aluminum | 4520 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440~70-2 | Calcium | 1110 | | | P | 1410 |
| | 7440-47-3 | Chromium | | | · · · · | | 1 |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | 7 |
| | 7439-89-6 | Iron | 203000 | | D | P | |
| | 7439-92-1 | Lead | | | | | 7 |
| | 7439-95-4 | Magnesium | 941. | J | | P | 1410 |
| | 7439-96-5 | Manganese | | | · · · · · · · · · · · · · · · · · · · | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | 1 |
| | 7440-09-7 | Potassium | 730. | J | | P | 1410 |
| | 7782-49-2 | Selenium | | - | | | 7 ' |
| | 7440-22-4 | Silver | | | <u> </u> | | |
| | 7440-23-5 | Sodium | 73.1 | J | E | P | 1410 L |
| | 7440-28-0 | Thallium | | | | | 1410 L |
| | 7440-62-2 | Vanadium | | | | - | 7 70 |
| | 7440-66-6 | Zinc | | | | | 1 |
| | 57-12-5 | Cyanide | | | | | 7 |
| | 3, 12 3 | - Oyuniuc | | | | | 1 |
| | | | | | | | |
| | L | <u> </u> | <u> </u> | <u> </u> | <u> </u> | | اـــا |
| Color Be | efore: RED | Clarit | y Before: | | Texture | : MEDIUN | 4 |
| | fter: YELLOW | | y After: CLEAR | | | | |
| | - · · · | | | | | | |
| Comments | | | nated due to the | | | | |

| | ~ | |
|----|-------|--|
| MH | .35H5 | |

| b Code | e: DATAC (| Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35 | | 4H35G5 | |
|--------|----------------|----------------|-----------------|------------------------------|------------|--------|--------|
| trix: | Soil | | Lab Sample | ID: | 1030769013 | | |
| Solids | s: <u>45.3</u> | <u> </u> | Date Recei | ved: | 11/03/2010 | | |
| ncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): r | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 1 _ |
| | 7440-36-0 | Antimony | . 0.47 | J | N | MS | 2.2 05 |
| | 7440-38-2 | Arsenic | 20.3 | | E | MS |] I |
| | 7440-39-3 | Barium | 142. | | | MS | , |
| | 7440-41-7 | Beryllium | 0.44 | J | E | MS | 1.1 05 |
| | 7440-43-9 | Cadmium | 0.70 | J | E | MS | 1.105 |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 6.4 | | E | MS |] I ' |
| | 7440-48-4 | Cobalt | 3.2 | | | MS |] |
| | 744050-8 | Copper | 80.7 | | E | MS | 1 7 |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 875. | | D | MS | |
| | 7439-95-4 | Magnesium | | | | |] |
| | 7439-96-5 | Manganese | 659. | | E | MS | 1 |
| | 7439-97-6 | Mercury | | | | | + 1/ |
| | 7440-02-0 | Nickel | 2.9 | | E | MS |] J 7 |
| | 7440-09-7 | Potassium | | | | | |
| | 7782-49-2 | Selenium | 1.6 | J | N | MS | 5,5 UI |
| | 7440-22-4 | Silver | 2.3 | | N | MS | I |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.61 | J | | MS | 1.1 UI |
| - | 7440-62-2 | Vanadium | 62.0 | | | MS | |
| | 7440-66-6 | Zinc | 206. | | NE | MS | 1- |
| | 57-12-5 | Cyanide | | | | | 2/ |
| | | | | | | | |
| lor Be | efore: ORANGE | E Clarit | y Before: | - | Texture: | MEDIUM | |
| lor Af | ter: BROWN | | y After: CLEAR | | | ; | |
| | | · | | | | | |

| MUSEUE | |
|---------|--|
| ringunu | |

| Gab Name | e: ALS Labora | atory Group | Contract: | EPWO: | 9036 | | <u></u> |
|-----------|------------------------|----------------------|------------------|--------------|----------------|---------------------------------------|---------------------------------------|
| | | Case No.: 4075 | | | SDG 1 | No.: M | IH35G5 |
| Matrix: | | | | | 1030769013 | | |
| o. Calida | 1E 2 | | Date Recei | wad. | 11/03/2010 | | |
| % Solids | 3: <u>45.3</u> | | Date Recer | vea. | 11/03/2010 | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | it):1 | mg/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 6730 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | _ |
| | 7440-43-9 | Cadmium | | | | | 1100 U 7 |
| | 7440-70-2 | Calcium | 859. | | | P | 11000 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 144000 | | D | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 2820 | | | P | |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 1050 | | | P | J+ 72 1100 U 72 2/18/10 |
| | 7440-09-7 | Potassium | 1250 | 1 | | P | 7' |
| | 7782-49-2 | Selenium | | | | | - |
| | 7440-22-4 | Silver | 102. | J | | P | 1100 11 7 |
| | 7440-23-5 | Sodium | 102. | " | <u> </u> | | 11000 |
| • | 7440-28-0 | Thallium Vanadium | | | | | 2/18/11 |
| | 7440-62-2 7440-66-6 | Zinc | , , | | | | · · · · · · · · · · · · · · · · · · · |
| | 57-12-5 | Cyanide | | | | 1 | - |
| | 57-12-5 | Cyanide | | | | - | - |
| | | | | - | - | | |
| | | | <u> </u> | ļ | <u> </u> | | <u>.</u> |
| Color Be | efore: ORANG | E Clarit | ty Before: | | Texture: M | EDIUM | · · · · · · · · · · · · · · · · · · · |
| Color Af | ter: YELLOW | . Clarit | ty After: CLEAR | | Artifacts: | | |
| Comments | , • | | | | | | |
| | | value is estim | nated due to the | pre | sence of inter | feren | ice. |
| | | | | | | | |
| | | | | | | | |
| | <u>.</u> | | | | | · · · · · · · · · · · · · · · · · · · | |

INORGANIC ANALYSIS DATA SHEET

| ix: | Soil | | Lab Sample | ID: | 1030769014 | | |
|------|--------------|---------------------------------------|-----------------|-------|-------------|--------|-----------|
| | s: 36.4 | · · · · · · · · · · · · · · · · · · · | _ | | 11/03/2010 | | |
| LLU | 3. 50.4 | | 2000 10001 | , | 11,00,101 | | |
| ent | ration Units | (ug/L, ug ox | mg/kg dry weigh | nt):r | ng/kg | | _ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 1.6 | J | N | MS | 2.70 |
| | 7440-38-2 | Arsenic | 35.6 | | E | MS | ľI |
| | 7440-39-3 | Barium | 85.9 | | | MS |] |
| | 7440-41-7 | Beryllium | 0.52 | J | E | MS | 1.40 |
| | 7440-43-9 | Cadmium | 2.7 | | E | MS |]] |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 8.0 | | E | MS |] 丁 |
| | 7440-48-4 | Cobalt | 4.7 | | | MS | |
| | 7440-50-8 | Copper | 212. | | E | MS | J |
| | 7439-89-6 | Iron | | | | J | |
| | 7439-92-1 | Lead | 2050 | | D | MS | |
| | 7439-95-4 | Magnesium | | | | | سي |
| | 7439-96-5 | Manganese | 1300 | | DE | MS | |
| | 7439-97-6 | Mercury | | | | | 4 |
| | 7440-02-0 | Nickel | 2.5 | | Е | MS | J |
| | 7440-09-7 | Potassium | | | | | 6.90. |
| | 7782-49-2 | Selenium | 1.1 | J | N | MS | 6.90. |
| | 7440-22-4 | Silver | 5.0 | | N | MS | - L |
| | 7440-23-5 | Sodium | | | | | 1 11 |
| | 7440-28-0 | Thallium | 0.41 | J | | MS | 1,40 |
| | 7440-62-2 | Vanadium | 37.2 | | | MS | - |
| | 7440-66-6 | Zinc | 628. | ļ | NE | MS | ٦ _ |
| | 57-12-5 | Cyanide | | | | | 1.40 J |
| | | | | | | | |
| : Be | efore: ORANG | E Clari | ty Before: | | Texture: l | MEDIUM | [|
| | fter: BROWN | | ty After: CLEAR | | | | |
| | | | - | | | | |

| EP | A SAM | 1PLE | NO. |
|----|-------|------|-----|
| | мнз | 35H6 | |

| Lab Name | e: ALS Labor | atory Group | Contract: | EPW090 | 36 | | <u></u> |
|----------|--------------|-----------------------|------------------|----------------|--|--------------|---------------------------|
| Lab Code | e: DATAC | Case No.: <u>4075</u> | Mod. Ref. | No.: _ | SDG | №.: № | 4H35G5 |
| Matrix: | Soil | | Lab Sample | : ID: <u>1</u> | 030769014 | | |
| % Solids | s: 36.4 | | Date Recei | .ved: <u>1</u> | 1/03/2010 | | |
| | | | | | | | |
| Concenti | ration Units | (ug/L, ug or | mg/kg dry weigh | nt): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | 5750 | | | P | 1 |
| | 7440-36-0 | Antimony | | | | | 1 |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | ************************************** | | 1 |
| | 7440-41-7 | Beryllium | | | | | 1 |
| | 7440-43-9 | Cadmium | | | | | 1 |
| | 7440-70-2 | Calcium | 1270 | | | P | 1370 U |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | - |
| | 7439-89-6 | Iron | 266000 | | D | P | |
| | 7439-92-1 | Lead | | | ***** | | |
| | 7439-95-4 | Magnesium | 2370 | | | P | |
| | 7439-96-5 | Manganese | | | | i - | 7 |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | 1 . |
| | 7440-09-7 | Potassium | 956. | J | | P | 1370 0 |
| | 7782-49-2 | Selenium | | | | | 1 |
| | 7440-22-4 | Silver | | | | | |
| | 7440-23-5 | Sodium | 78.6 | J | E | P | 1370 U 1370 U 2/181 |
| | 7440-28-0 | Thallium | | | | | 11.01 |
| | 7440-62-2 | Vanadium | | | | | 1 29/01 |
| | 7440-66-6 | Zinc | | | | | 1 |
| | 57-12-5 | Cyanide | | | | | 1 |
| | | | | | | | |
| Calam Da | form ODANG | Z Clamit | I Poforo | 1 1 | Texture: N | AE' IN T LIM | _ |
| COTOL DE | fore: ORANGI | r Crarro | ty Before: | | - revenue. E | TEDION | |
| Color Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts | : | |
| Comments | • | | | | | | |
| | | raluo ia oatim | ated due to the | nross | nce of into | rferon | 1CA |
| ட: TN∈ | e reborced A | arue is escin | iated due to the | brese | TICE OF THE | ドエニエニに | |

| EPA | SAMPLE | NO. | |
|-----|--------|-----|--|
| | мн35н8 | | |

| trix: | Soil | | Lab Sample | ID: | 1030769015 | | |
|--------|----------------|----------------------|---|----------|------------|----------|--------|
| Solids | s: <u>29.7</u> | \$11.2.1.00 5 | Date Recei | ved: | 11/03/2010 | | |
| ncenti | ation Units | (ug/L, ug or | mg/kg dry weigh | it):n | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | *************************************** | | | |] |
| | 7440-36-0 | Antimony | 5.6 | | N | MS | T 7 |
| | 7440-38-2 | Arsenic | 126. | | E | MS | I T |
| | 7440-39-3 | Barium | 21.4 | - | | MS | 1 |
| | 7440-41-7 | Beryllium | 0.26 | J | E | MS | 1.7 01 |
| | 7440-43-9 | Cadmium | 0.12 | J | E | MS | 1.703 |
| | 7440~70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 7.4 | | E | MS |] [|
| | 7440-48-4 | Cobalt | 1.1 | J | | MS | 3.4 U |
| | 7440-50-8 | Copper | 369. | | E | MS | I |
| | 7439-89-6 | Iron | | | | |] |
| | 7439-92-1 | Lead | 59.4 | | | MS | |
| | 7439-95-4 | Magnesium | | | | |] |
| • | 7439-96-5 | Manganese | 130. | | E | MS |]Ţ |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 1.1 | J | E | MS | 1.705 |
| | 7440-09-7 | Potassium | | | | |] |
| | 7782-49-2 | Selenium | 2.4 | J | N | MS | 8.40 |
| | 7440-22-4 | Silver | 0.29 | J | N | MS | 1.703 |
| | 7440-23-5 | Sodium | | | | | _ |
| | 7440-28-0 | Thallium | 0.070 | J | | MS | 1.707 |
| | 7440-62-2 | Vanadium | 88.0 | | | MS | |
| | 7440-66-6 | Zinc | 63.3 | <u> </u> | NE | MS | J- |
| | 57-12-5 | Cyanide | | | | <u> </u> | 1 21 |
| | | | | | | | |
| or Be | efore: ORANGI | Clarit | y Before: | | Texture: M | EDIUM | |
| or Af | ter: COLORLI | ESS Clarit | y After: CLEAR | | Artifacts: | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | мн35н8 | |

| Matrix: | Soil | | Lab Sample | ID: 3 | L030769015 | | | |
|---------|--------------|------------|-------------------|---------|-------------|----------|------|------------------|
| e Solid | s: 29.7 | | Date Recei | _ | | | | _ |
| . DOLLO | .5. 27.1 | | Date noce | veu. | 21,00,2010 | | | _ |
| Concent | ration Units | ug/L, ug o | r mg/kg dry weigh | ıt): mç | ŋ/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 4960 | | ·- | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | , | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | , | | | | | |
| | 7440-70-2 | Calcium | 1820 | | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 519000 | | D | P | | |
| | 7439-92-1 | Lead | | | | | 0 | _ 7 |
| | 7439-95-4 | Magnesium | 1460 | | | P | 1680 | 0 0 7 |
| | 7439-96-5 | Manganese | | | | | | . |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | _ | | <u> </u> | 1/80 | 1) H |
| | 7440-09-7 | Potassium | 583. | J | | P | 1600 | U |
| | 7782-49-2 | Selenium | | | | | | _ |
| | 7440-22-4 | Silver | | | | ļ | 1100 | 1) TK |
| | 7440-23-5 | Sodium | 141. | J | E | P | 1680 | U_{1} |
| | 7440-28-0 | Thallium | | | | - | | U 74 U 74 2/18/1 |
| | 7440-62-2 | Vanadium | | | | | , | |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| olor B | efore ORANG | E Clari | ty Before: | | Texture: C | OARSE | | |
| | | | | | | | | _ |
| Color A | fter: YELLOW | Clari | ty After: CLEAR | | Artifacts: | - | | |
| Comment | ٠. | | | | | | | |

| | | 0 407C | Mod. Ref. | | | | |
|---------|----------------|--------------|---------------------------------------|---------------|---------------------------------------|----------|--|
| atrix: | Soil | | Lab Sample | 1D: 10 | 730/69016 | • | |
| Solid | s: <u>34.2</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| | | | | | (1 | | |
| oncent: | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg/ | ⁄ кд | | _ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 1 |
| | 7440-36-0 | Antimony | 1.2 | J | N | MS | 29 UI |
| | 7440-38-2 | Arsenic | 43.9 | | E | MS | 子ラ |
| | 7440-39-3 | Barium | 3.5 | J | | MS |] — |
| | 7440-41-7 | Beryllium | 1.2 | J | E | MS | 29 UI 1.5 UI 1.5 UI |
| | 7440-43-9 | Cadmium | 0.74 | J | E | MS | 150T |
| | 7440-70-2 | Calcium | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| | 7440-47-3 | Chromium | 0.62 | J | E | MS | 2905 |
| | 7440-48-4 | Cobalt | 0.62 | J | | MS | 2.9 U J |
| | 7440-50-8 | Copper | 11.0 | | E | MS | T |
| | 7439-89-6 | Iron | | | | | 1 - |
| | 7439-92-1 | Lead | 1740 | | D | MS | 1 |
| | 7439-95-4 | Magnesium | | | | | 1 |
| | 7439-96-5 | Manganese | 107. | | E | MS | 1.5 UJ 7.3 UJ 1.5 UJ 1.5 UJ J- 2/1 |
| | 7439-97-6 | Mercury | | | | | 7 |
| | 7440-02-0 | Nickel | 0.59 | J | E | MS | 1.5 UJ |
| | 7440-09-7 | Potassium | | | | | 1 |
| | 7782-49-2 | Selenium | 0.34 | J | N | MS | 7.305 |
| | 7440-22-4 | Silver | 0.88 | J | N | MS | 1.505 |
| | 7440-23-5 | Sodium | · · · · · · · · · · · · · · · · · · · | | | | ,,,,,, |
| | 7440-28-0 | Thallium | 0.017 | J | | MS | 1.5 UJ |
| | 7440-62-2 | Vanadium | 12.4 | | | MS | |
| | 7440-66-6 | Zinc | 361. | | NE | MS | 1 I - 7 |
| | 57-12-5 | Cyanide | | | · · · · · · · · · · · · · · · · · · · | | |
| | | | | | | | 711 |
| | | | | | | | |
| lor R | efore: RED | Clarit | y Before: | | Texture: | MEDTIM | 1 |
| TOT D | erore. KED | CIGIT. | Ly Deloie. | | _ ICAECIC: | 11001011 | |
| lor A | fter: COLORL | ESS Clarit | ty After: CLEAR | | _ Artifacts | ·: | |
| mments | | | | | | | |

INORGANIC ANALYSIS DATA SHEET

| o code: | DATAC | Lase No.: 407. | Mod. Ref. | | | NO <u>F</u> | 113303 |
|----------|-------------|----------------|------------------|-------|------------|-------------|-------------------------|
| trix: | Soil | | Lab Sample | ID: | 1030769016 | | |
| Solids: | 34.2 | | Date Recei | ved: | 11/03/2010 | | <u></u> . |
| | | | | | | | |
| ncentra | ation Units | (ug/L, ug or | mg/kg dry weigh | t): m | g/kg | | |
| ſ | CAS No. | Analyte | Concentration | С | Q | М |] |
| ŀ | 7429-90-5 | Aluminum | 3170 | | | P | 1 |
| | 7440-36-0 | Antimony | | | . v | | 1 |
| | 7440-38-2 | Arsenic | | | | | 1 |
| ľ | 7440-39-3 | Barium | | | | |] |
| | 7440-41-7 | Beryllium | | | | |] |
| Ī | 7440-43-9 | Cadmium | | | | |] |
| Ī | 7440-70-2 | Calcium | 1490 | | | P | |
| Ī | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| Ī | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 445000 | | D | P | } |
| | 7439-92-1 | Lead | | | | | 111/2 /3 |
| [| 7439-95-4 | Magnesium | 327. | J | | P | 1460 U |
| | 7439-96-5 | Manganese | | | | | 1460 U |
| L | 7439-97-6 | Mercury | | | | | |
| Į | 7440-02-0 | Nickel | | | | | 1460 U 1460 U 2/1 |
| | 7440-09-7 | Potassium | 268. | J | | P | 11460 U |
| Į | 7782-49-2 | Selenium | | | | | 4 |
| - F | 7440-22-4 | Silver | <u> </u> | | | | 1 26/5 / |
| <u>_</u> | 7440-23-5 | Sodium | 28.6 | J | E | P | 1460 0 |
| | 7440-28-0 | Thallium | | | | | 1 2/1 |
| ŀ | 7440-62-2 | Vanadium | <u> </u> | | | | · " |
| | 7440-66-6 | Zinc | | | | | - |
| . | 57-12-5 | Cyanide | | | | | - |
| | | | | | | | 1 |
| L | | | | | | | J . |
| or Bef | ore: ORANGI | Clari | ty Before: | | Texture: | MEDIUM | |
| or Aft | er: YELLOW | Clari | ty After: CLEAR | | Artifacts | s: | |
| | | | | | | | |
| ments: | | | mated due to the | | | | |

| | | | | | | MH35 | 70 | |
|-----------|--------------|---------------|------------------|------------------|-----------|-------------|----------------|--------------|
| Lab Name | : ALS Labora | tory Group | Contract: I | EPW09036 | 5 | | | _ |
| Lab Code | : DATAC C | ase No.: 4075 | Mod. Ref. | No.: | SDO | G No.: M | IH35 <u>G5</u> | • |
| Matrix: | Soil | | Lab Sample | ID: <u>103</u> | 30769017 | | | |
| % Solids | : 60.6 | | Date Recei | ved: <u>11</u> / | /03/2010 | | | ****** |
| Concentra | ation Units | (ug/L, ug or | mg/kg dry weigh | t): mg/k | rg | | 1 | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | 、ール |
| | 7440-36-0 | Antimony | 0.29 | J | N | MS | 1.74 | 71 |
| | 7440-38-2 | Arsenic | 33.3 | | E | MS | I | N |
| | 7440-39-3 | Barium | 92.7 | - 1 | | MS | | N N N |
| | 7440-41-7 | Beryllium | 1.1 | | E | MS | T+ | 71 |
| | 7440-43-9 | Cadmium | 1.3 | | E | MS | 7 | N |
| | 7440-70-2 | Calcium | | | , | | 7 | |
| | 7440-47-3 | Chromium | 7.6 | | E | MS | 1 | N |
| | 7440-48-4 | Cobalt | 16.5 | | | MS | " | |
| | 7440-50-8 | Copper | 209. | | E | MS | 1 | U |
| | | Iron | 203. | | | | ~ | |
| | 7439-89-6 | | 711. | | D | MS | 1 | |
| | 7439-92-1 | Lead | /11. | | | - 110 | 1 | |
| , | 7439-95-4 | Magnesium | 4120 | | DE | MS | 7 | 7 |
| | 7439-96-5 | Manganese | 4130 | | 176 | MS | ~ | _ |
| | 7439-97-6 | Mercury | | | | | 1 | U |
| | 7440-02-0 | Nickel | 8.0 | | E | MS | - . | |
| | 7440-09-7 | Potassium | | ļ | | | // | T K |
| | 7782-49-2 | Selenium | 0.32 | J | N | MS | 4.1 0 | |
| | 7440-22-4 | Silver | 2.1 | | N | MS | J | Æ |
| | 7440-23-5 | Sodium | | | | | 00 | % |
| | 7440-28-0 | Thallium | 0.39 | J | | MS | 0.83 | UIT |
| | 7440-62-2 | Vanadium | 64.1 | | | MS | | n |
| | 7440-66-6 | Zinc | 289. | | NE | MS |]] - | n 2/18/16 |
| | 57-12-5 | Cyanide | | | | | | 2/18/16 |
| | | | | | | |] | • |
| | | | | , | | | 1 | |
| | fore: BROWN | | ty Before: | | Texture | - | | |
| Color Af | ter: COLORLE | CSS Clarit | ty After: CLEAR | | Artifact | .s: | | _ |
| Comments | • | | | | | | | |
| | | alua ie aetim | nated due to the | present | ce of int | terferer | ce. | |
| <u> </u> | reported A | aruc is count | acca dae co cire | 2200011 | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| | | | | | | MH | 35J0 | |
|----------|----------------|----------------|-------------------|---------------|----------|-----------|-----------------|--------------------------|
| Lab Name | e: ALS Labora | atory Group | Contract: | EPW09 | 036 | | | |
| Lab Code | e: DATAC (| Case No.: 4075 | 5 Mod. Ref. | No.: | | SDG No. | : <u>МН35G5</u> | _ |
| Matrix: | Soil | | Lab Sample | ID: | 10307690 |)17 | | |
| % Solids | s: <u>60.6</u> | | Date Recei | ved: | 11/03/20 |)10 | | |
| Concenti | ration Units | (ug/L, ug or | mg/kg dry weigh | nt): m | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | 1 | 4 | |
| | 7429-90-5 | Aluminum | 13700 | | | | 2 | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | - | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1660 | | | I | ⊋ | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | , | | | |
| | 7439-89-6 | Iron | 37300 | | | I | 2 | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 8730 | | | I | P. | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | <u> </u> | |
| | 7440-02-0 | Nickel | 44.00 | | | | ┤' | 71 |
| | 7440-09-7 | Potassium | 703. | | | I | 825 | ν " |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | , , , | | | | | -20 |
| | 7440-23-5 | Sodium | 25.2 | J | E | 1 | 2 823 | T U / |
| | 7440-28-0 | Thallium | | 1 | | | | ט אר ד ט די 2/18/1 |
| | 7440-62-2 | Vanadium | | | | ĺ | | 4191 |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| Color Be | efore: BROWN | Clarit | y Before: | | Textu | ıre: COAR | SE | |
| | Eter: YELLOW | | y After: CLEAR | | | acts: | | |
| | | | <u> </u> | | | | | · · · · · |
| Comments | | | | | ongo of | intenfer | rongo | |
| E: Th | e reported v | alue is estim | nated due to the | pres | ence of | Interier | ence. | |
| | | | | . | | | | |
| | | | | | | | | |

INORGANIC ANALYSIS DATA SHEET

| b Code | : DATAC | Case No.: 407 | 55 Mod. Ref. | йо.: _ | SDG | No.: M | IH35G5 |
|---------|--------------|----------------------|------------------|---------------|--------------|---------|----------------|
| trix: | Soil | | Lab Sample | | | | <u> </u> |
| 0 | | | | | | • | |
| Solids | : 33.1 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): mg/ | /kg | _ | _ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 1.0 | J | И | MS | 3.001 |
| | 7440-38-2 | Arsenic | 49.8 | | E | MS | 1 7 |
| | 7440-39-3 | Barium | 75.6 | | | MS | |
| | 7440-41-7 | Beryllium | 0.26 | J | E | MS | 1.503 |
| | 7440-43-9 | Cadmium | 0.28 | J | E | MS | 1.50J 1.50J |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 7.1 | | E | MS | I I |
| | 7440-48-4 | Cobalt | 3.9 | | | MS | TZ |
| | 7440-50-8 | Copper | 96.7 | | E | MS | I E |
| | 7439-89-6 | Iron | | | | | 1 |
| | 7439-92-1 | Lead | 421. | | | MS | 4 |
| | 7439-95-4 | Magnesium | | | | | |
| • | 7439-96-5 | Manganese | 618. | | E | MS | I |
| | 7439-97-6 | Mercury | | | | | TZ |
| | 7440-02-0 | Nickel | 3.6 | <u> </u> | E | MS | J Z |
| | 7440-09-7 | Potassium | | <u> </u> | | | 10111 |
| | 7782-49-2 | Selenium | 1.5 | J | Ŋ | MS | 7.6 UJ |
| | 7440-22-4 | Silver | 2.4 | <u> </u> | N | MS | 1 |
| | 7440-23-5 | Sodium | | | | | 1 |
| • | 7440-28-0 | Thallium | 0.31 | J . | | MS | 11.2 07 |
| | 7440-62-2 | Vanadium | 43.1 | | | MS | - 7 |
| | 7440-66-6 | Zinc | 98.1 | | NE | MS | 1.5 UI J- 7 |
| _ | 57-12-5 | Cyanide | | ļļ | ···· | | 1 2/ |
| - | | | | | | | <u> </u> |
| _ | | · | | | | |] |
| lor "Be | efore: ORANG | E Clari | ty Before: | | _ Texture: | MEDIUM | <u> </u> |
| lor Aí | Eter: BROWN | Clari | ity After: CLEAR | | _ Artifact | s: | |
| | - | | | | | | |
| mments | 3: | | | | | anfan- | 200 |
| E: Th | e reported | <u>value is esti</u> | mated due to the | prese | nce or int | errerer | ice. |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| | | | | | حا عند | SAMEL | 110. | | |
|--|--------------|----------------|-----------------|------------------|-----------|--|-------------|------|--|
| | | | | | | | MH35J1 | | |
| Tab Name | : ALS Labora | torv Group | Contract: E | EPW09036 | <u> </u> | | | | |
| | | | | | | | | | |
| Lab Code | : DATAC C | ase No.: 4075! | Mod. Ref. 1 | Mod. Ref. No.: | | _ SDG No.: MH35G5 | | | |
| Matrix: | Soil | | Lab Sample | ID: <u>1030</u> | 769018 | | | | |
| % Solids | : 33.1 | | Date Recei | ved: <u>11/0</u> | 3/2010 | | | | |
| Concentr | etion Units | (na/L na or | mg/kg dry weigh | t): ma/ka | , | | | | |
| Concentra | | 1 1 | | | | | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | | |
| | 7429-90-5 | Aluminum | 3240 | | | P | | | |
| | 7440-36-0 | Antimony | | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | | |
| | 7440-39-3 | Barium | | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | | |
| | 7440-43-9 | Cadmium | | | | <u> </u> | | 7 | |
| | 7440-70-2 | Calcium | 1070 | J | | P | 1510 | U | |
| | 7440-47-3 | Chromium | | | | | - | | |
| | 7440-48-4 | Cobalt | | | | | | | |
| • | 7440-50-8 | Copper | | | | | | | |
| | 7439-89-6 | Iron | 300000 | | D | P | | | |
| | 7439-92-1 | Lead | | | | | | _ | |
| | 7439-95-4 | Magnesium | 1210 | J | | · P | 1510 | U | |
| | 7439-96-5 | Manganese | | | | | | | |
| - | 7439-97-6 | Mercury | ···· | | | | , 1510 | | |
| • • | 7440-02-0 | Nickel | | | | | | | |
| • | 7440-09-7 | Potassium | 1020 | J | ***** | P | 1510 | U | |
| • | 7782-49-2 | Selenium | | | | | | | |
| | 7440-22-4 | Silver | | | *.40* ** | 1 | | | |
| | 7440-23-5 | Sodium | 90.9 | J | E | P | 1510 | υ | |
| • | 7440-28-0 | Thallium | | | | | 1510 | -1.0 | |
| | 7440-62-2 | Vanadium | | | | | 1 | 2/18 | |
| | 7440-66-6 | Zinc | | | | |] | | |
| | 57-12-5 | Cyanide | | | | | | | |
| - | | -1 | | h | | 1 | 1 | | |
| | | | | | | | ĺ | | |
| | L | J | <u>.</u> | 1 | · | • | • | | |
| Color Be | fore: ORANGE | Clarit | y Before: | | exture: M | MEDIUM. | | - | |
| Color After: YELLOW Clarity After: CLEAR | | | | | rtifacts: | | | | |
| Commonte | | | | | | | | | |
| Comments | | alua ia aatim | ated due to the | nragence | of inter | rferen | ce. | | |

| EPA | SAMPLE | NO. |
|-----|---------|-----|
| • • | MH35.T2 | |

| | | | | | | MH35 | J2 | |
|----------|----------------|----------------|------------------|----------|----------|------------|----------|--------------|
| Lab Name | e: ALS Labor | atory Group | Contract: | EPW09 | 036 | | | |
| Lab Code | e: DATAC | Case No.: 4075 | Mod. Ref. | No.: | | SDG No.: I | MH35G5 | |
| Matrix: | Soil | | Lab Sample | | | | | |
| | | | | - | | | • | _ |
| % Solid | s: <u>32.7</u> | | Date Recei | ved: | 11/03/20 | 10 | | _ |
| Concent: | ration Units | (ug/L, ug or | mg/kg dry weigh | nt): m | g/kg | | _ | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | - 21 |
| | 7440-36-0 | Antimony | 1.7 | J | N | MS | ∫3,1 U | リルイス |
| | 7440-38-2 | Arsenic | 49.1 | | Е | MS |] I | M |
| | 7440-39-3 | Barium | 41.3 | | | MS | | -21 |
| | 7440-41-7 | Beryllium | 0.13 | J | E | MS |] 1,5 U | 1 2 |
| | 7440-43-9 | Cadmium | 1.0 | J | E | MS | 1.5L |)J 72 |
| | 7440-70-2 | Calcium | | | | |] ′ | 21 |
| | 7440-47-3 | Chromium | 2.2 | J | E | MS |] [| n |
| | 7440-48-4 | Cobalt | 16.6 | | | MS |] _ | K |
| | 7440-50-8 | Copper | 32.8 | | E | MS | | r |
| | 7439-89-6 | Iron | | | | | | |
| | 7439-92-1 | Lead | 419. | | | MS | | |
| | 7439-95-4 | Magnesium | | | | | | |
| | 7439-96-5 | Manganese | 2110 | | DE | MS |] [| fd. |
| | 7439-97-6 | Mercury | | | | | | 71 |
| | 7440-02-0 | Nickel | 1.7 | | E | MS |] | ₽ C. |
| | 7440-09-7 | Potassium | | | | | | - 76 |
| | 7782-49-2 | Selenium | 0.23 | J | N | MS | 7,60 | UJ / |
| | 7440-22-4 | Silver | 0.84 | J | N | MS | 1,5 L | ロゴル |
| | 7440-23-5 | Sodium | | | | | | - 7 |
| | 7440-28-0 | Thallium | 0.25 | J | | MS | 1.50 | I T |
| | 7440-62-2 | Vanadium | 12.0 | | | MS | | 7/ |
| | 7440-66-6 | Zinc | 232. | | NE | MS |]]- | H |
| | 57-12-5 | Cyanide | | | | | 5 | Vi8/n |
| | ~ | | | | | | - | • |
| Colom Da | efore: ORANG | . Clarit | y Before: | <u> </u> | Toytu | re: MEDIUM | | |
| COTOL B | erore: OKANG | | | | _ | | <u> </u> | _ |
| Color A | fter: COLORL | ESS Clarit | ty After: CLEAR | | Artif | acts: | <u>.</u> | _ |
| Comments | | | | | | | | |
| E: Th | e reported v | alue is estim | nated due to the | prese | ence of | interferer | nce. | |

| E | PΑ | SAMPLE | NO. |
|---|----|--------|-----|
| | | MH35J2 | · |

| Lab Code | e: DATAC C | Case No.: 4075 | 5 Mod. Ref. | №.:_ | SDG 1 | No.: M | 1H35G5 |
|----------|----------------|----------------|-----------------|---------|--------------|-----------|-----------------------------|
| Matrix: | Soil | <u></u> | Lab Sample | ID: 3 | 1030769019 | | |
| % Solid | s: <u>32.7</u> | | Date Recei | ved:] | 11/03/2010 | | <u></u> |
| Concent: | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mç | J/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 2320 | | | P | _ |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | <u></u> . | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | 15300 |
| | 7440-70-2 | Calcium | 729. | J | | P | 15300 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 462000 | | D | Р | _ |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 1040 | J | | P | 1530 U. |
| | 7439-96-5 | Manganese | | | | | _ |
| | 7439-97-6 | Mercury | | | | |] |
| | 7440-02-0 | Nickel | | | | | (0.5.1) |
| | 7440-09-7 | Potassium | 373. | J | | P | 1530 0 |
| | 7782-49-2 | Selenium | | | | | <u> </u> |
| | 7440-22-4 | Silver | | | | | The |
| | 7440-23-5 | Sodium | 30.5 | J | E | P | 1530 U |
| | 7440-28-0 | Thallium | | | | ļ | 1530 U TO 1530 U TO 2/18/11 |
| | 7440-62-2 | Vanadium | | | | |] 2/1811 |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | - |
| | | | | | | | _ |
| Color B | efore: ORANG | Clari | ty Before: | | . Texture: M | EDIUM | · |
| Color A | fter: YELLOW | | ty After: CLEAR | | | | |
| | | | | | | | |
| Comment | s: | value is estin | | | | | |

| | | | Contract: | | | | 7725.05 | |
|--------------------------------|--------------|--------------|------------------|--------------------------------|---------------|--------|----------------------|------------|
| ab Code: DATAC Case No.: 40755 | | | 55 Mod. Ref. | Mod. Ref. No.: SDG No.: MH35G5 | | | | |
| atrix: | Soil | | Lab Sample | ID: <u>1</u> | 030769020 | | | |
| Solids | : 28.6 | | Date Recei | ved: <u>1</u> | .1/03/2010 | | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | r/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | |
| | 7440-36-0 | Antimony | 0.51 | J | N | MS | 3,50 1,70 1,70 | I |
| | 7440-38-2 | Arsenic | 26.7- | | E | MS | 1 | 7 |
| | 7440-39-3 | Barium | 159. | | | MS | | |
| | 7440-41-7 | Beryllium | 1.6 | J | E | MS | 1.70. | 1 |
| | 7440-43-9 | Cadmium | 1.0 | J | E | MS | 1.70 | I |
| | 7440-70-2 | Calcium | | | | | | |
| | 7440-47-3 | Chromium | 5.1 | | E | MS | I | ′ |
| | 7440-48-4 | Cobalt | 18.6 | | | MS | | H |
| | 7440-50-8 | Copper | 216. | | E | MS | I | , , |
| | 7439-89-6 | Iron | | | | | | |
| | 7439-92-1 | Lead | 210. | | | MS | | |
| | 7439-95-4 | Magnesium | | | | | T 7 | y |
| • | 7439-96-5 | Manganese | 897. | | E | MS | I I | _ |
| | 7439-97-6 | Mercury | | | | | | 2 |
| | 7440-02-0 | Nickel | 6.0 |] | E | MS | J | <u>Z</u> . |
| | 7440-09-7 | Potassium | | | | | | |
| | 7782-49-2 | Selenium | 1.2 | J | N | MS | 8,70 1.70 | J |
| | 7440-22-4 | Silver | 0.56 | J | N | MS | 1.70 | τ |
| | 7440-23-5 | Sodium | | | | |] | _ |
| | 7440-28-0 | Thallium | 0.50 | J | | MS | 1.70- | 1 |
| | 7440-62-2 | Vanadium | 31.3 | | | MS | | _, |
| | 7440-66-6 | Zinc | 339. | | NE | MS | 1- | 1 |
| | 57-12-5 | Cyanide | | | | | 1.70= I- | /18 |
| | | | | | | | | |
| lor Be | efore: BROWN | Clari | ty Before: | | Texture: M | EDIUM | | |
| olor Af | ter: YELLOW | Clari | ty After: CLEAR | | Artifacts | | | |
| mments | | | | | | | | |
| E: The | e reported v | alue is esti | mated due to the | prese | ence of inter | rferen | ce. | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35J3 | |

| ab Code | e: DATAC (| Case No.: 407 | Mod. Ref. | No.: | SDG | No.: \underline{M} | H35G5 |
|---------|------------------------|-----------------------|------------------|--------------|---------------|----------------------|---|
| atrix: | Soil | <u> </u> | Lab Sample | ID: <u>1</u> | .030769020 | | |
| Solids | s: <u>28.6</u> | | Date Recei | ved: 1 | 1/03/2010 | | <u>_</u> |
| | | | /1 | 4. \ | /1- m | | |
| ncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | .c): mg | | 1 | i |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 28200 | | | P | |
| | 7440-36-0 | Antimony | | | | 1 | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | <u> </u> | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | 1 | |
| | 7440-70-2 | Calcium | 1950 | | | P | |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 62200 | | | P | |
| | 7439-92-1 | Lead | 0000 | | | | |
| | 7439-95-4 | Magnesium | 2280 | | | Р | - |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 974. | J | | P | 1740 1 |
| | 7440-09-7 | Potassium Selenium | 3/4. | - | | | , , , , , , |
| | 7782-49-2 7440-22-4 | Silver | | | | | |
| | 7440-22-4 | Sodium | 88.4 | J | E | P | 1740 0 |
| | 7440-23-3 | Thallium | | | | | 111111111111111111111111111111111111111 |
| | 7440-28-0 | Vanadium | | | | 1 | 1740 U 1740 U 2/1 |
| | 7440-62-2 | Zinc | + | | | | l ' |
| | 57-12-5 | Cyanide | | | | 1 | |
| | 3, 12 3 | 1 3,411-40 | | | | 1 | |
| | | | | | | 1 | |
| | ļ., | | <u> </u> | | <u> </u> | | 1 |
| lor Be | efore: <u>BROW</u> N | Clari | ty Before: | | _ Texture: C | OARSE | |
| lor A | fter: YELLOW | Clari | ty After: CLEAR | | Artifacts: | ŧ | |
| LOL A. | rcer. IEEEOW | | | | | | |
| mment | s: | | | | | | |
| F• Th | e reported v | zalue is esti | mated due to the | prese | ence of inter | feren | ce. |

| b Name | : ALS Labora | tory Group | Contract: | | | | |
|--------|--------------|-----------------|------------------|--|-------------|-------------|--------|
| b Code | : DATAC C | Case No.: 407 | Mod. Ref. | No.: _ | SDG | No.: M | IH35G5 |
| trix: | Soil | | Lab Sample | ID: <u>1</u> | 030769021 | | |
| Solids | : 78.1 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| | | | /1 | +1 - mar | /lea | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | rr): mg | / kg | | 1 |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 0.94 | J | N | MS | 113 UI |
| | 7440-38-2 | Arsenic | 23.7 | | E | MS | J |
| | 7440-39-3 | Barium | 117. | | | MS |] |
| | 7440-41-7 | Beryllium | 0.48 | J | E | MS | 0.64 0 |
| | 7440-43-9 | Cadmium | 9.6 | | E | MS | J |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 8.4 | | E | MS | J |
| | 7440-48-4 | Cobalt | 8.0 | | | MS | 7 |
| | 7440-50-8 | Copper | 244. | | E | MS |] 」 / |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 1820 | | D | MS |] |
| | 7439-95-4 | Magnesium | | | | | - 7 |
| | 7439-96-5 | Manganese | 1180 | | DE | MS |] 丁 ′ |
| | 7439-97-6 | Mercury | | | | | 7 5 |
| | 7440-02-0 | Nickel | 5.8 | | E | MS |] [|
| | 7440-09-7 | Potassium | | | | |] _ |
| | 7782-49-2 | Selenium | 0.85 | J | N | MS | 3,20. |
| • | 7440-22-4 | Silver | 5.4 | | N | MS | J |
| | 7440-23-5 | Sodium | | | | |] ~ |
| | 7440-28-0 | Thallium | 0.31 | J | | MS | 0.640 |
| | 7440-62-2 | Vanadium | 53.6 | | | MS | 1 |
| | 7440-66-6 | Zinc | 2610 | | DNE | MS | J- 21 |
| | 57-12-5 | Cyanide | | | | |] 🦪 |
| | | | | | | | |
| lor Po | force VELLO | . Clari | ty Before: | <u> </u> | Texture: | MEDIUM | |
| | | | | | | | |
| Lor Af | ter: BROWN | Clari | ty After: CLEAR | | - ATCTTACES | · | |
| mments | | | mated due to the | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| |
|--------|
| МН35J4 |

| ab Cod | de: DATAC C | ase No.: 4075 | 5 Mod. Ref. | No.: | SDG | No.: M | 1H35G5 | | |
|------------------|---------------|---------------|-----------------|-------------------------|--|--------|-------------|-------|--|
| | | | | Lab Sample ID: 10307690 | | | | | |
| atrix: | Soil | | гар зашрте | TD: | 1030769021 | | | | |
| Solid | ds: 78.1 | | Date Recei | ved: [| 11/03/2010 | | | | |
| oncent | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | g/kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | | |
| | 7429-90-5 | Aluminum | 13900 | | | P | 1 | | |
| | 7440-36-0 | Antimony | | | | |] | | |
| | 7440-38-2 | Arsenic | | | | |] | | |
| | 7440-39-3 | Barium | | | | |] | | |
| | 7440-41-7 | Beryllium | | | | | J | | |
| | 7440-43-9 | Cadmium | | | | |] | | |
| | 7440-70-2 | Calcium | 5910 | | | P |] | | |
| | 7440-47-3 | Chromium | | | | |] | | |
| | 7440-48-4 - | Cobalt | | | | |] | | |
| | 7440-50-8 | Copper | | | | | 1 | | |
| | 7439-89-6 | Iron | 47800 | | | P | 1 | | |
| | 7439-92-1 | Lead | | | | | | | |
| | 7439-95-4 | Magnesium | 11200 | | | P | | | |
| | 7439-96-5 | Manganese | | | | | 1 | | |
| | 7439-97-6 | Mercury | | | | | 1 | | |
| | 7440-02-0 | Nickel | | | | | ļ. <u> </u> | | |
| | 7440-09-7 | Potassium | 1070 | | | P | 1 1 + | | |
| | 7782-49-2 | Selenium | | | | | J+ | | |
| | 7440-22-4 | Silver | | | | + | -,,,, | ٠ ١ | |
| | 7440-23-5 | Sodium | 77.9 | J | E | P | 1640 | ν | |
| | 7440-28-0 | Thallium | | ļļ. | | | | 2 | |
| | 7440-62-2 | Vanadium | | | | - | 4 | - | |
| | 7440-66-6 | Zinc | | | | | - | | |
| | 57-12-5 | Cyanide | , | | | | | | |
| | | | | | | | _ | | |
| | | | | L <u>.</u>]. | | | j | | |
| olor E | Before: BROWN | Clarit | y Before: | | Texture: | COARSE | | | |
| olor A | After: YELLOW | Clarit | y After: CLEAR | | Artifacts | : | | | |
| _ | | | | | | | | | |
| Comment די יו | | alue is estim | ated due to the | prese | ence of inte | rferen | ice. | | |
| 11 s 11 | TO TEDOTFER A | TAC TO COUNTY | acca due to the | Pr COC | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| EPA | SAMPLE | NO. | |
|-----|--------|-----|--|
| | MH35J5 | | |

| Lab Name | : ALS Labora | tory Group | Contract:] | EPW09 | 036 | | |
|--------------------|--------------------------|---------------|---------------------------|--------|---------------|---------------|---------------------|
| Lab Code | e: DATAC Case No.: 40755 | | 5 Mod. Ref. | No.: | SDG N | lo.: <u>I</u> | MH35G5 |
| Matrix: | Soil | Lab Sample | Lab Sample ID: 1030769022 | | | | |
| % Solids | s: <u>82.7</u> | | Date Recei | ved: | 11/03/2010 | | |
| Concentr | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): m | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | | | | | 1 <i>7</i> 1 |
| | 7440-36-0 | Antimony | 0.14 | J | N | MS | 11201 |
| | 7440-38-2 | Arsenic | 13.5 | | E | MS | 1 T |
| | 7440-39-3 | Barium | 113. | | | MS | 1,2 U I n |
| | 7440-41-7 | Beryllium | 0.44 | J | E | MS | 10.60 UI |
| | 7440-43-9 | Cadmium' | 0.11 | J | E | MS | 0.60 UI |
| | 7440-70-2 | Calcium | | | | | -11 |
| | 7440-47-3 | Chromium | 10. | | E | MS | I |
| | 7440-48-4 | Cobalt | 6.8 | | | MS | 740 |
| | 7440-50-8 | Copper | 40.6 | | E | MS | J m |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 241. | | | MS | 1 |
| | 7439-95-4 | Magnesium | | | | | - n. |
| - | 7439-96-5 | Manganese | 796. | | DE | MS | |
| | 7439-97-6 | Mercury | | | | | 7 |
| | 7440-02-0 | Nickel | 6.6 | | E | MS | J 4 |
| | 7440-09-7 | Potassium | | | | | _ 7 |
| | 7782-49-2 | Selenium | 0.62 | Ĵ | N | MS | 3.001 |
| | 7440-22-4 | Silver | 1.3 | | N | MS | 3.0 UJ J M |
| | 7440-23-5 | Sodium | | | | | 1 |
| | 7440-28-0 | Thallium | 0.33 | J | | MS | 0.60 05 |
| | 7440-62-2 | Vanadium | 65.3 | | | MS | |
| | 7440-66-6 | Zinc | 102. | | NE | MS | 1 T- n |
| | 57-12-5 | Cyanide | | | | | 0.60 UJ J- 2/181 |
| | | | | | | | |
| Color Be | fore: BROWN | Clarit | y Before: | | Texture: ME | EDIUM | <u> </u> |
| Color Af | ter: WHITE | Clarit | y After: CLEAR | | Artifacts: | | |
| Commonte | | | | | | | |
| Comments E: The | | alue is estim | ated due to the | pres | ence of inter | feren | ice. |
| | | | | | | | |
| | | | | | | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

| ab Code | E: DATAC C | Case No.: 4075 | | | SDG | NO <u>r</u> | 1115565 | _ |
|---------|----------------|------------------------|------------------------|--------------|--------------|-------------|---------|------|
| atrix: | Soil | | Lab Sample | ID: <u>1</u> | .030769022 | | | _ |
| Solids | s: <u>82.7</u> | | Date Recei | ved: 1 | .1/03/2010 | | | _ |
| ncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | /kg | | | • |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 12900 | | | Р | 1 | |
| | 7440-36-0 | Antimony | | | | |] | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 2080 | | | P | | |
| | 7440-47-3 | Chromium | | | | | 4 | |
| | 7440-48-4 | Cobalt | | | ***** | | | |
| | 7440-50-8 | Copper | 2.5020 | | | | - | |
| | 7439-89-6 | Iron | 36900 | | | P | - | |
| | 7439-92-1 | Lead | 10700 | - | | P | - | |
| • | 7439-95-4 | Magnesium Manganese | 10700 | | | | · · | |
| | 7439-97-6 | Mercury | | | | | 1 | |
| | 7440-02-0 | Nickel | | | | | 1 | |
| | 7440-09-7 | Potassium | 1030 | | | P | J+ | 19 |
| | 7782-49-2 | Selenium | | | 4 | | 1 | |
| | 7440-22-4 | Silver | | | | | i | |
| | 7440-23-5 | Sodium | 81.2 | J | E | P | 605 | U |
| | 7440-28-0 | Thallium | | | | | | 2/1 |
| | 7440-62-2 | Vanadium | | | | | | 2/10 |
| | 7440-66-6 | Zinc | | , | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | <u></u> | | | | | } | |
| lor Be | efore: BROWN | . Clarit | ty Before: | | Texture: | COARSE | | |
| lor At | ter: YELLOW | Clarit | ty After: CLEAR | | Artifacts | s: | | |
| | | | | | | | | |
| olor Ai | | Clarit | cy After: <u>CLEAR</u> | | Artifacts | s: | | _ |

REGION VIII DATA VALIDATION REPORT INORGANIC

| Case/TDD No. | Site | Name | Operable Unit |
|-----------------------|-----------------|---------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Mi | ning District | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | MH35H7 | |

| Review Assigned Date: | December 15, 2010 | Data Validator: | Fred Luck |
|--------------------------|-------------------|-------------------|-------------|
| Review Completion Date:_ | February 18, 2011 | Report Reviewer:_ | Lesley Boyd |

| Sample ID | Matrix | Analysis |
|-----------|----------------|-------------|
| МН35Н7 | Sediment | CLP –Metals |
| MH35J6 | Soil - Surface | |
| MH35J7 | | · |
| MH35J8 | | |
| MH35J9 | · | |
| MH35K0 | | · . |
| MH35K1 | | |
| MH35K2 | | |
| MH35K3 | | |
| MH35K4 | · | |
| MH35K5 | | |
| МН35К6 | | |
| MH35K7 | | |

| | U | O | S |
|--|---|---|---|
|--|---|---|---|

| Sample ID | Matrix | Analysis |
|-----------|----------|-------------|
| MH35K8 | Sediment | CLP –Metals |
| MH35K9 | | |
| MH35L0 | | |
| MH35L1 | | |
| MH35L2 | | |
| MH35L3 | | |

DATA QUALITY STATEMENT

| () | Data are ACCEPTABLE according to EPA Functional guideling by the reviewer. | nes with no qualifiers (flags) added |
|----------------|--|--------------------------------------|
| () | Data are UNACCEPTABLE according to EPA Functional Guid | delines. |
| (X) | Data are acceptable with QUALIFICATIONS noted in review. | |
| Teleph | one/Communication Logs Enclosed? Yes | NoX |
| CLP Prattentio | roject Officer Attention Required? Yes No X | If yes, list the items that require |

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 40755, SDG No. MH35H7, consisted of nineteen sediment / soil – Surface samples for metals by ICP-AES and ICP-MS (ISM01.2). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|--|-----------|------------|--------------------------|-------------------|
| MH35H7, MH35J7, MH35K1, MH35K2, MH35K4, MH35K5, MH35K7, MH35K8, MH35K9, MH35L1, MH35L2 | Antimony | U· | Blank Contamination | 3 |
| MH35H7, MH35J6, MH35J7, MH35J8, MH35J9, MH35K0 MH35K1, MH35K2, MH35K3, MH35K4, MH35K5, MH35K6, MH35K9, MH35L3 | Beryllium | | | |
| MH35H7, MH35J7, MH35K2, MH35K5, MH35K9, MH35L3 | Cadmium | • | | |
| MH35J7, MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35K6, MH35K9, MH35L0, MH35L3 | Calcium | | | |
| MH35K0, MH35K3, MH35K5 | Chromium | | | İ |
| MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35L3 | Cobalt | ! | | |
| MH35J7, MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35K9, MH35L3 | Magnesium | | | |
| MH35J8, MH35J9, MH35K0, MH35K3, MH35K5, MH35L3 | Nickel | | | |
| MH35J7, MH35J8, MH35K8, MH35K9, MH35L0, MH35L3 | Potassium | | | |
| MH35H7, MH35J6, MH35J7, MH35J8, MH35J9, MH35K0, MH35K1, MH35K2, MH35K4, MH35K5, MH35K6, MH35K7, MH35K8, MH35K9,MH35L0, MH35L1, MH35L2, MH35L3 | Selenium | | | |
| MH35H7 | Silver | | | |

URS Operating Services, Inc.

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|--|---|------------|--|-------------------|
| MH35H7, MH35J6, MH35J7, MH35J8, MH35J9, MH35K0, MH35K1, MH35K2, MH35K3, MH35K4, MH35K5, MH35K6, MH35K7, MH35K8, MH35K9, MH35L0, MH35L1, MH35L2, MH35L3 | Sodium | υ | Blank Contamination | 3 |
| MH35K7, MH35K8, MH35L0, MH35L1, MH35L2 | Beryllium | J+ | Potentially false positive detection in ICS check sample | 4 |
| MH35H7, MH35J6, MH35J9, MH35K0, MH35K1, MH35K2, MH35K3, MH35K4, MH35K5, MH35K6, MH35K7, MH35L1, MH35L2 | Potassium | | | |
| MH35J7, MH35J8, MH35K2, MH35K4, MH35K5, MH35K6, MH35K8, MH35K9, MH35L2, MH35L3 | Thallium | J- | Potentially false negative detection in ICS check sample | |
| All Samples | Copper, Lead | J/UJ | Original & Duplicate both >5x the CRQL and RPD > 20% | 6 |
| · | Antimony, Silver | J/UJ | MS <30%R, Post Digestion Spike %R ≥ 75% | 7 |
| | Barium, Copper | J+ | MS >125%R, Post Digestion Spike not performed | |
| | Arsenic | | MS > 125%R, Post Digestion Spike %R > 125% | |
| | Arsenic, Beryllium, Cadmium, Copper, Nickel, Sodium, Zinc | J/UJ | Serial Dilution %D > 10% | 8 |

2. .

Comments:

None.

PRESERVATION AND HOLDING TIMES 1.

| All technical ho | olding times and preservation criteria were met. |
|-------------------------------------|---|
| Yes | No_X_ |
| Comments: | The samples were analyzed within 180 days for the ICP metals. According to the Sample Log-In Sheet and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2 °C. The Sample Log-In Sheet further indicates that neither cooler contained a Cooler Temperature Indicator Bottle, as indicated on the form to be required. There is also no indication that SMO was contacted regarding this issue, neither is any documentation of the resolution or indication of how the cooler temperature was derived provided. The TR/COC also did not designate a sample for laboratory QC, but the documentation of the resolution of this issue is provided in the SDG. |
| | When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters. |
| | No other shipping or receiving problems were noted. Chain-of-custody, summary forms, and raw data were evaluated. |
| | T CALIBRATIONS: INITIAL AND CONTINUING CALIBRATION ON (ICV AND CCV) |
| The initial and of SOW requirements | continuing calibration verification standards (ICV and CCV, respectively) met ents. |
| Yes_X_ | No |
| Comments: | None. |
| | verification results were within 90-110% recovery for metals, 85-115% for -120% for mercury. |
| Yes_X_ | No |
| Comments: | None. |
| The continuing | calibration standards were run at 10% frequency or every two hours. |
| Yes_X_ | No |



| ~ | *** | ABTECO |
|----|-----|--------|
| 3. | 441 | ANKS |
| | | |

| The initial and requirements. | continuing calibration blanks (ICB and CCB, respectively) met SOW |
|----------------------------------|--|
| Yes_X_ | No |
| Comments: | None. |
| The continuing | g calibration blanks were run at 10% frequency. |
| Yes_X_ | No |
| Comments: | Continuing calibration blanks were run every 10 samples. |
| A laboratory/p delivery group | reparation blank was run at the frequency of one per twenty samples, or per sample (whichever is more frequent), and for each matrix analyzed. |
| Yes_X_ | No |
| Comments: | None. |
| All analyzed b | lanks were free of contamination. |
| Yes | No_X_ |
| Comments: The qualification, e | ne following table lists the blanks with contamination that resulted in sample lements present, affected samples, and data qualifiers: |

Blank Contaminants

| Blank ID | Contam- inant | CRQL (mg/Kg) | MDL (mg/Kg) | Concentration Found in Blank (mg/Kg) | Associated Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-------------|------------------|-----------------|----------------|--|--------------------|---------------------------------------|--------------------------|
| PB | Antimony | | 0.0097 | 0.026 | MH35H7 | 0.19 | 1.5 U |
| | | 1 | 0.0057 | 0.020 | MH35J7 | 1.2 | 1.3 U |
| | | 1 ^ | | | MH35K1 | 0.26 | 1.1 U |
| | | | · | | MH35K2 | 0.25 | 1.1 U |
| | | | | | MH35K4 | 0.54 | 1.1 U |
| | | | | | MH35K5 | 0.99 | 1.1 U |
| | | - | | | MH35K7 | 0.41 | 1.1 U |
| | | | | | MH35K8 | | |
| | | | | | | 0.59 | 1.3 U |
| | | | | | MH35K9 | 5.2 | 6.8 U |
| | | | | · · · · · · · · · · · · · · · · · · · | MH35L1 | 0.71 | 1.7 U |
| | | | | | MH35L2 | 0.34 | 1.2 U |
| PB | Beryllium | 0.5 | 0.0032 | 0.013 | MH35H7 | 0.68 | 0.76 U |
| | | | | | _MH35J6 | 0.19 | 0.60 U |
| | | | | | MH35J7 | 0.22 | 0.65 U |
| | l | | | | MH35J8 | 0.16 | 0.78 U |
| | | | | | MH35J9 | 0.21 | 0.56 U |
| | | | | | MH35K0 | 0.32 | 0.55 U |
| | | | | | MH35K1 | 0.30 | 0.57 U |
| | | | | | MH35K2 | 0.20 | 0.55 U |
| | | | | į | MH35K3 | 0.11 | 0.54 U |
| | | | | | MH35K4 | 0.35 | 0.54 U |
| | | | | | MH35K5 | 0.13 | 0.55 U |
| | | | | | MH35K6 | 0.19 | 0.55 U |
| | | | | | MH35K9 | 0.84 | 3.4 U |
| | | | | | MH35L3 | 0.11 | 3.0 U |
| PB | Cadmium | 0.5 | 0.0027 | 0.005 | MH35H7 | 0.25 | 0.76 U |
| 1 1 | Cadimuni | 0.5 | 0.0027 | 0.005 | MH35J7 | 0.58 | 0.75 U |
| | | | | | MH35K2 | 0.55 | 0.05 U |
| | | 1 | • | | MH35K5 | 0.53 | 0.55 U |
| | | 1 | | | MH35K9 | | |
| | | | | | | 1.7 | 3.4 U |
| | | ļ | | | MH35L3 | 2.8 | 3.0 U |
| PB | Calcium | 500 | 1.7 | 9.992 | MH35J7 | 369 | 648 U |
| | | | | | MH35J8 | 405 | 775 U |
| | | | | | MH35J9 | 57.7 | 563 U |
| | | | | | MH35K0 | 259 | 551 U |
| | | | | | MH35K3 | 34.8 | 535 U |
| | | | | | MH35K5 | 48.6 | 554 U |
| | | | | | MH35K6 | 246 | 547 U |
| | | | | | MH35K9 | 2040 | 3380 U |
| | | 1 | | | MH35L0 | 223 | 718 U |
| | | i | | | MH35L3 | 279 | 2980 U |
| PB | Chromium | 1 | 0.026 | 1.000 | MH35K0 | 0.97 | 1.1 U |
| | <u></u> | | | | MH35K3 | 0.86 | 1.1 U |
| | | [| | | MH35K5 | 0.46 | 1.1 U |
| PB | Cobalt | . 1 | 0.0053 | 0.006 | MH35J8 | 0.41 | 0.78 U |
| 110 | Sound | · • | 0.0000 | 0.000 | MH35J9 | 0.19 | 0.76 U |
| | | | | | MH35K0 | 0.19 | 0.55 U |
| | | 1 | | | MH35K3 | 0.23 | |
| | | | | | | | 0.54 U |
| | | . | | | MH35K5 | 0.12 | 0.55 U |
| | | L | <u> </u> | | MH35L3 | 1.4 | 3.0 ℧ |

| | | | | | Associated | Concentration | |
|--------------|-----------|---------|----------|------------------------|------------|---------------|------------|
| Blank | Contam- | CRQL | MDL | Concentration | Samples | Found in | Qualifier/ |
| \mathbf{p} | inant | (mg/Kg) | (mg/Kg) | Found in Blank (mg/Kg) | | Sample | Adjustment |
| | | | | | | (mg/Kg) | |
| · PB | Magnesium | 500 | 1.2 | 2.971 | MH35J7 | 477 | 648 U |
| | | - | | | MH35J8 | 375 | 775 U |
| | | | | | MH35J9 | 45.9 | 563 U |
| | | | | | MH35K0 | 72.4 | 551 U |
| | | | - | | MH35K3 | 38.2 | 535 U |
| 1 | | | | | MH35K5 | 118 | 554 U |
| | | | <u> </u> | | MH35K9 | 2120 | 3380 U |
| | | | | | MH35L3 | 486 | 2980 U |
| PB | Nickel | 0.5 | 0.013 | 0.500 | MH35J8 | 0.36 | 0.78 U |
| | | | , | | MH35J9 | 0.19 | 0.56 U |
| | | | | | MH35K0 | 0.17 | 0.55 U |
| | | | | | MH35K3 | 0.27 | 0.54 U |
| | | | | | MH35K5 | 0.14 | 0.55 U |
| | | | | | MH35L3 | 1.6 | 3.0 U |
| PB | Potassium | 500 | 5.8 | 21.198 | MH35J7 | 319 | 648 U |
| | | | | | MH35J8 | 418 | 775 U |
| | | | | | MH35K8 | 645 | 664 U |
| | | | | | MH35K9 | 1130 | 3380 U |
| | | | | | MH35L0 | 307 | 718 U |
| | | | | | MH35L3 | 773 | 2980 U |
| PB | Selenium | 2.5 | 0.036 | 2.500 | MH35H7 | 1.1 | 3.8 U |
| • | | | | | MH35J6 | 2.7 | 3.0 U |
| | | | | | MH35J7 | 1.2 | 3.2 U |
| .] | | | | | MH35J8 | 1.4 | 3.9 U |
| | | | | | MH35J9 | 1.7 | 2.8 U |
| | | · | | | MH35K0 | 1.8 | 2.8 U |
| | | | | | MH35K1 | 1.3 | 2.8 U |
| | | | | | MH35K2 | 0.60 | 2.8 U |
| | | 1 | | | MH35K4 | 0.83 | 2.7 U |
| | | | | - | MH35K5 | 0.90 | 2.8 U |
| | | | | | MH35K6 | 1.3 | 2.7 U |
| | | | | | MH35K7 | 0.52 | 3.0 U |
| | | | • | | MH35K8 | 0.35 | 3.3 U |
| | | | | - | MH35K9 | 2.0 | 17 U |
| | | | | | MH35L0 | 0.66 | 3.6 U |
| | <u>[</u> | | | | MH35L1 | 0.59 | 4.3 U |
| | | | | | MH35L2 | 0.59 | 3.0 U |
| • | | | | | MH35L3 | 4.2 | 15 U |
| PB | Silver | 0.5 | 0.0023 | 0.004 | MH35H7 | 0.41 | 0.76 U |
| | | 7.5 | 0.002 | V.UUT | 21222JJXX/ | 0.71 | 0.70 0 |
| PB | Sodium | 500 | 0.73 | 12.529 | MH35H7 | 80.1 | 761 U |
| 1 | 20010111 | | V.75 | 12,22,7 | MH35J6 | 77.4 | 604 U |
| | | | | | MH35J7 | 38.8 | 648 U |
| | | | | | MH35J8 | 43.9 | 775 U |
| | | | | | MH35J9 | 22.3 | 563 U |
| | | | | | MH35K0 | 59.0 | 551 U |
| | | | | | MH35K1 | 39.0 37.7 | 569 U |
| | | | | | MH35K2 | | |
| | | | l | | | 105 | 552 U |
| | | | | | MH35K3 | 53.9 | 535 U |
| | | | | | MH35K4 | 64.3 | 541 U |
| | | | | | MH35K5 | 53.1 | 554 U |
| L | <u> </u> | | | | MH35K6 | 70.9 | 547 U |

URS Operating Services, Inc.

Comments:

| Blank ID | Contam- inant | CRQL (mg/Kg) | MDL (mg/Kg) | Concentration Found in Blank (mg/Kg) | Associated Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-------------|------------------|-----------------|----------------|--|-----------------------|--|--------------------------|
| PB | Sodium | 500 | 0.73 | 12.529 | MH35K7 | 59.2 | 597 U |
| | | | • | | MH35K8 | 22.1 | 664 U |
| <u>.</u> | | | | | MH35K9 | 139 | 3380 U |
|] | | | | | MH35L0 | 23.0 | 718 U |
| | | | | | MH35L1 | 44.3 | 855 U |
| | | | | | MH35L2 | 16.7 | 600 U |
| | | | | | MH35L3 | 48.1 | 2980 U |

4. INDUCTIVELY COUPLED PLASMA - INTERFERENCE CHECK SAMPLE (ICP-ICS)

The ICP interference check sample (ICS) was run at the beginning and end of each sample analysis run and every 20 analytical samples, but not prior to the ICV. Yes X No Comments: None. Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ± the CRQL. Yes X No Comments: None. Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values or no interference was noted. Yes X No NA Comments: None. Sample results contain potential false positives and false negatives. Yes X No

The following table lists the elements with potential false positives or false

negatives that resulted in sample qualification, affected samples, and data qualifiers:

ICP Interferences

| Element | Concentration Found in ICSA Sample (ug/L) | Affected Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-----------|---|------------------|---|--------------------------|
| Beryllium | 0.36 | MH35K7 | >MDL | J+ |
| Derymum | 0.50 | MH35K8 | ~WIDL | J ^T |
| | | MH35L0 | | |
| | | MH35L1 | | |
| | | MH35L2 | | |
| Potassium | 494 | MH35H7 | | |
| | | MH35J6 | | |
| | | MH35J9 | | |
| | | MH35K0 | | |
| ı | | MH35K1 | | |
| | | MH35K2 | | |
| | | MH35K3 | | • |
| | | MH35K4 | | |
| - | | MH35K5 | | |
| | | MH35K6 | | |
| | | MH35K7 | | |
| | | MH35L1 | | |
| | | MH35L2 | | |
| Thallium | -0.05 | MH35J7 | 0.23 | J- |
| ı namum | -0.05 | MH35J8 | 0.10 | |
| | | MH35K2 | 0.36 | |
| | | MH35K4 | 0.38 | |
| | | MH35K5 | 0.43 | |
| | | MH35K6 | 0.37 | |
| | | MH35K8 | 0.41 | |
| | | MH35K9 | 0.31 | , |
| | | MH35L2 | 0.44 | |
| | | MH35L3 | 0.19 | |

5. LABORATORY CONTROL SAMPLE

| The laboratory control sample (LCS) was prepared and analyzed with every twenty o | r few | er |
|--|--------|----|
| samples of a similar matrix, or one per sample delivery group (whichever is more fre | quent) |). |

| Yes_X_ | No |
|-----------|-------|
| Comments: | None. |

All results were within control limits OF 70-130%.

Yes_X No___

None.

Comments:

7.

| 6 | FORM 6 & 12 | DUPLICATE SAMPLE ANALYSIS |
|----|----------------|----------------------------------|
| v. | TUNIVIU & IZ - | · DELETT. A FE SAIVEELE ANALYSIS |

| Dupli or on | icate sam e per sam | ple an ple de | alysis livery | was per group (| formed with whichever is | every t more f | wenty or fewer sarequent). | amples of | a similar m | atrix, |
|----------------|--|---------------------------------|--------------------------|--|--|-------------------|--|------------|-------------|--------|
| Yes_ | X | No_ | | NA_ | | | | | | |
| Com | ments: | Non | e. | | | | | | | |
| The F | RPDs wer | e calc | ulated | correctl | ly. | | | | | |
| Yes_ | X | No_ | | NA | | | | | | |
| Comr | ments: | Non | e. | | | | | | | |
| ±35% Yes_ | apply for | r soil/s No_ The | sedimo X follow | ents/taili NA ving tabl | ings samples |). | CRQL, RPDs wer | | | |
| | Elem | ent | i c | PD | OCT | | C 1 PC | | O. Ve | |
| | | V11 L | | | QC Lin | II-IU separation | Samples Aff | ectea | Qualifie | ers |
| | Copper | VIII C | 43% | Y ES CAMBINATION | 20% | III Germania | All samples | ectea | J/UJ | ers |
| | | | | <u>X</u> • • • • • • • • • • • • • • • • • • • | | | • " | ected | | 9165 |
| | Copper Lead ample con ontrol win | centra | 43% 71% attions | less thar | 20% | he CRO | • " | | 1/01 | |
| YesComm | Copper Lead ample con ontrol win | centra dow o No_ None | 43% 71% attions of CRe | less than QL (abs NA | 20% | he CRO | All samples L, duplicate ana | | 1/01 | |
| the co | Copper Lead Ample con ontrol win X ments: E SAMP trix spike | ncentra dow o No_ None | 43% 71% ations of CRO e. | less than QL (absorption NA YSIS analyze | 20% | twenty | All samples (L, duplicate ana RQL for soils). | lysis resu | J/UJ | hin |
| the co | Copper Lead Ample con ontrol win X ments: E SAMP trix spike er sample | None LE A | 43% 71% ations of CRO e. | less that QL (abso NA | 20% In five times to olute different differen | twenty | All samples (L, duplicate ana RQL for soils). | lysis resu | J/UJ | hin |



| The percent recoveries | 40 / TO > | | | . 4 |
|-----------------------------|-----------|-----------|----------|--------------|
| The more and reconstruction | /U/ I/A | TTTOWA AA | laniatad | a a mua attr |
| THE DELICENT TECHNOLOGY | 1 7 A K S | MACHE CAL | илилен | CHILETIA |
| | | | | |

Yes X

No

NA

Comments:

None.

Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration).

Yes_X_

No_X

Comments:

The following table lists the spike recoveries outside control limits, post

digestion spike recoveries, samples affected, and data qualifiers:

| Element | Matrix Spike %R | Post-Digestion %R | Samples Affected | Qualifiers |
|----------|--------------------|-------------------|------------------|------------|
| Antimony | 17% | 85% | All samples | J/UJ |
| Arsenic | 130% | 944% | | J+ |
| Barium | 128% | NA . | · | |
| Copper | 134% | NA | | |
| Silver | 11% | 88% | | J/UJ |

NA - No Post digest spike analyzed

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

Yes

No X

NA

Comments:

For Arsenic and Copper the spike recoveries were outside of the Control Limits,

but no Post-Digest Spike was performed.

8. ICP SERIAL DILUTION

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Yes_X_

No____

Comments:

None.



| The serial dilution | was without i | interference | problems as | defined by | y the SOW. |
|---------------------|---------------|--------------|-------------|------------|------------|
|---------------------|---------------|--------------|-------------|------------|------------|

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

| Element | % Difference | Samples Affected | Qualifiers |
|-----------|--------------|------------------|------------|
| Arsenic | 21% | All samples | J |
| Beryllium | 19% | | |
| Cadmium | 22% | | |
| Copper | 14% | | |
| Nickel | 15% | | |
| Sodium | 53% | | |
| Zinc | 29% | | |

9. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

Comments: The

The SDG shows no indication of EPA Region 8 initiating any additional QA / QC.

10. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_ No___

Comments: None.

11. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes_X_ No___

Comments: None.

URS Operating Services, Inc.

12. FORM 13 - ANALYSIS RUN LOG

| A Form 13 with the required infor | rmation was filled ou | it for each analysis run | in the data package. |
|-----------------------------------|-----------------------|--------------------------|----------------------|
| | | | |

Yes_X_ No___

Comments: None.

13. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
- J+ The associated numerical value is an estimated quantity but the result may be biased high.
- J- The associated numerical value is an estimated quantity but the result may be biased low.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value.

 The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

| AA | Atomic Absorption |
|------|--------------------------------------|
| Ag | Silver |
| CCB | Continuing Calibration Blank |
| CCV | Continuing Calibration Verification |
| CFR | Code of Federal Regulations |
| CLP | Contract Laboratory Program |
| CRA | CRQL standard required for AA |
| CRQL | Contract Required Quantitation Limit |
| CRI | CRQL standard required for ICP |
| CV | Cold Vapor |
| EPA | U.S. Environmental Protection Agency |
| GFAA | Graphite Furnace Atomic Absorption |
| Hg | Mercury |
| ICB | Initial Calibration Blank |
| ICP | Inductively Coupled Plasma |

ICS Interference Check Sample

ICSA Interference Check Sample (Solution A)
ICSAB Interference Check Sample (Solution AB)

ICV Initial Calibration Verification
LCS Laboratory Control Sample

LRA Linear Range Verification Analysis

MDL Method Detection Limit
PDS Post Digestion Spike

QC Quality Control

RPD Relative Percent Difference RPM Regional Project Manager

RSD Percent Relative Standard Deviation

SA Spike Added

SAS Special Analytical Services

SDG Sample Delivery Group

SOW Statement of Work

SR Sample Result

SSR Spiked Sample Result

USEPA - CLP 1A-IN INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO.

| | | | | | | МН35Н | 7 |
|----------------|--------------|----------------|-----------------------|---------------|---|-------------|---------|
| Lab Name | : ALS Labora | tory Group | Contract: | EPW090 | 36 | | |
| Lab Code | : DATAC C | Case No.: 4075 | Mod. Ref. | No.: _ | | SDG No.: MH | 135Н7 |
| Matrix: | Soil | | Lab Sample | ID: 1 | .0307700 | 01 | · |
| % Solids | : 65.7 | | Date Recei | ved: <u>1</u> | 1/03/20 | 10 | |
| | | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): mg | r/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 5550 | | | Р | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1500 | | | P | |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 30000 | | *************************************** | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 2560 | | | P | |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | / | | | | |
| | 7440-02-0 | Nickel | | | · | | |
| | 7440-09-7 | Potassium | 934. | | | P | T + |
| | 7782-49-2 | Selenium | | | | | 9 |
| | 7440-22-4 | Silver | | | | | |
| | 7440-23-5 | Sodium | 80.1 | J | E | P | 7610 |
| | 7440-28-0 | Thallium | · - | - | | | į O (O |
| | 7440-62-2 | Vanadium | | | | | J+ 7610 |
| | 7440-66-6 | Zinc | ·· | | | | |
| | 57-12-5 | Cyanide | | | | | |
| ļ | | - <u>3</u> | | | | | |
| Ì | | | | | | | |
| l Color Pot | Foro. ODANCE | C7 a mit | y Before: | | Torre | - MEDIUM | |
| OTOT DEI | OTE. OVANOR | Crarit | A perore: | | rextul | re: MEDIUM | |
| Color Aft | er: YELLOW | Clarit | y After: <u>CLEAR</u> | | _ Artifa | acts: | |
| Comments: | | | | | | | |
| | | | | | | | _ |
| ይ: The | reported va | alue is estim | ated due to the | prese | nce of i | nterierenc | e |

| EP | A 5 | SAM | NO | • | |
|----|-----|-----|----|---|---|
| | | | | | _ |

| | | | | | | МН35 | H7 |
|-----------|-------------|--|-----------------|----------|-------------|------------|-------------|
| Lab Name | : ALS Labor | atory Group | Contract: | EPW09 | 036 | | |
| Lab Code | : DATAC | Case No.: <u>4075</u> | 5 Mod. Ref. | No.: | | SDG No.: 1 | 4H35H7 |
| Matrix: | Soil | | Lab Sample | | | - | |
| % Solids | : 65.7 | | Date Recei | ved: | 11/03/20 | 10 | |
| | | | 2400 110001 | ·ou· | 11,00,20 | <u> </u> | |
| Concentr | ation Units | s (ug/L, ug or | mg/kg dry weigh | ıt): m | ıg/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 0.19 | J | N | MS | 1,50 |
| | 7440-38-2 | Arsenic | 11.7 | | NE | MS | + t |
| | 7440-39-3 | Barium | 190. | | N | MS | + 7 |
| | 7440-41-7 | Beryllium | 0.68 | J | E | MS | 0.7603 |
| | 7440-43-9 | Cadmium | 0.25 | J | E | MS | 0.7602 |
| | 7440-70-2 | Calcium | | | | | .0 - ,0 - 2 |
| | 7440-47-3 | Chromium | 4.8 | | | MS | |
| | 7440-48-4 | Cobalt | 4.3 | | * | MS | |
| | 7440-50-8 | Copper | 34.5 | | *NE | MS | J+ " |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 72.5 | | * | MS | J 4 |
| | 7439-95-4 | Magnesium | | | | | 7 |
| | 7439-96-5 | Manganese | 568. | | | MS | •- |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 3.9 | | E | MS | TR |
| | 7440-09-7 | Potassium | | | | | Į. |
| | 7782-49-2 | Selenium | 1.1 | J | | MS | 224 4 |
| | 7440-22-4 | Silver | 0.41 | J | N | MS | D 7607 |
| | 7440-23-5 | Sodium | | | | | 3.80 7 |
| | 7440-28-0 | Thallium | 0.52 | J | | MS | |
| | 7440-62-2 | Vanadium | 45.2 | | | MS | -I |
| | 7440-66-6 | Zinc | 99.0 | | *E | MS | 7 2/18 |
| | 57~12-5 | Cyanide | | | | 1 - 1 - 1 | ٧ , |
| | | | | \dashv | | | 2/18 |
| ľ | | | | | ·· | | l |
| Color Bei | ore: ORANGE | Clarity | y Before: | | Textur | e: MEDIUM | |
| Color Aft | er: GRAY | Clarity | y After: CLOUDY | , | | | |
| | | | | | | | |
| Comments: | | | | | | | |
| E: The | reported v | alue is estima | ited due to the | prese | ence of i | nterferenc | ce. |
| | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| | |
|-------|----|
| | |
| мн35Ј | 16 |

| | | | | | | MH35 | J6 | |
|----------|---------------------------------|----------------|--|--------------------------------|-------------|--------------|--------|--|
| Lab Name | e: ALS Labor | atory Group | Contract: | EPW09036 | | | | |
| Lab Code | Lab Code: DATAC Case No.: 40755 | | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35H7 | | | ин35н7 | |
| Matrix: | Soil | | Lab Sample | ID: <u>103</u> | 30770004 | | | |
| % Solids | s: <u>82.8</u> | | Date Recei | ved: <u>11/</u> | 03/2010 | | | <u>. </u> |
| Concenti | cation Units | (ug/L, ug or | mg/kg dry weigh | nt): mg/k | a | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | 8780 | | ν | P | | |
| | 7440-36-0 | Antimony | 0700 | | · | P | - | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | - | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1780 | | | P | | |
| | 7440-47-3 | Chromium | 1100 | | | - | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440~50-8 | Copper | | | | ļ | | |
| | 7439-89-6 | Iron | 102000 | | D | P | | |
| | 7439-92-1 | Lead | | - | *** | | | |
| | 7439-95-4 | Magnesium | 5600 | | | P | | |
| | 7439-96-5 | Manganese | | | | - | | • |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | |
| | 7440-09-7 | Potassium | 790. | | | P | T+ | TK |
| | 7782-49-2 | Selenium | | | | | 7 | |
| | 7440-22-4 | Silver | , 10 / ₂ · 10 · 10 · 10 · 10 · 10 · 10 · 10 · 1 | | | | | |
| | 7440-23-5 | Sodium | 77.4 | J | E | P | 604 | UTZ |
| | 7440-28-0 | Thallium | | | | | 00 | 7K UJ 7 2/18/11 |
| | 7440-62-2 | Vanadium | | | * | | | 2/18/11 |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | • | | · | | • |
| Color Be | fore: BROWN | Clarit | y Before: | | Texture: MI | EDIUM | | _ |
| Color Af | ter: YELLOW | Clarit | y After: <u>CLEAR</u> | <i>I</i> | Artifacts: | <u> </u> | | _ |
| Comments | • | | | , | | | | |
| | | alue is estima | ated due to the | presence | e of inter | ferenc | ce. | |
| | | | | | | | " | _ |
| | | | | | | | | _ |
| | | | | | | | | - |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| 1 | MH35J6 | |
|---|--------|--|

| Lab Name | e: ALS Labora | atory Group | Contract: | EPW09 | 9036 | | | _ |
|----------|---------------|----------------|-----------------|--------|---------------------------------------|--|---------------|------------------|
| Lab Code | e: DATAC C | Case No.: 4075 | Mod. Ref. | No.: | SDG 1 | No.: 1 | 4H35H7 | _ |
| Matrix: | Soil | | Lab Sample | ID: | 1030770004 | | | ·• |
| % Solids | 82.8 | | Date Recei | ved: | 11/03/2010 | | | _ |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): m | ıg/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | 1 | |
| | 7440-36-0 | Antimony | 1.8 | | N | MS | J | K |
| | 7440-38-2 | Arsenic | 9.1 | | NE | MS | 1+ | 71 |
| | 7440-39-3 | Barium | 105. | | N | MS | 77770.60 | K H H |
| | 7440-41-7 | Beryllium | 0.19 | J | E | MS | 0.60 | UJZ |
| | 7440-43-9 | Cadmium | 0.63 | | E | MS | 1 | 75 |
| | 7440-70-2 | Calcium | ***** | | | | 7 | |
| | 7440-47-3 | Chromium | 4.9 | | | MS | | |
| | 7440-48-4 | Cobalt | 1.3 | | * | MS | | |
| | 7440-50-8 | Copper | 195. | | *NE | MS | J+ | H |
| | 7439-89-6 | Iron | - | | | | T+ J | |
| | 7439-92-1 | Lead | 6440 | | D* | MS | T | Z |
| | 7439-95-4 | Magnesium | | | | | 7 | |
| | 7439-96-5 | Manganese | 452. | | | MS | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | 2.3 | | E | MS | 1 | Z |
| | 7440-09-7 | Potassium | | | ···· | | ~ | • |
| | 7782-49-2 | Selenium | 2.7 | J | | MS | 3.00 | 'Ł |
| | 7440-22-4 | Silver | 103. | | DN | MS | 1 | R |
| | 7440-23-5 | Sodium | | | | | 4 | |
| | 7440-28-0 | Thallium | 0.50 | J | · · · · · · · · · · · · · · · · · · · | MS | | KA. |
| i | 7440-62-2 | Vanadium | 26.0 | | | MS | -J | 7-13/10 |
| | 7440-66-6 | Zinc | 167. | | *E | MS | J | 7 15A 2/18/11 |
| | 57-12-5 | Cyanide | | | | | | 2/18/11 |
| į | | | | | | | | |

| Color Before: BROWN | Clarity Before: | Texture: MEDIUM |
|------------------------------------|-------------------------------|-------------------|
| Color After: BROWN | Clarity After: CLOUDY | Artifacts: |
| Comments: E: The reported value is | estimated due to the present | e of interference |
| | obelimated due to the probent | of interrelete. |

| HEET | EPA | SAMPLE | NO. |
|------|-----|--------|-----|
| | | | |

| | | atory Group | | EPW090 |)36 | | |
|----------|------------------|----------------------|------------------|---------|--|-------------|----------------------------|
| Lab Cod | le: <u>DATAC</u> | Case No.: <u>407</u> | 55 Mod. Ref. | No.: _ | SDG | No.: | МН35Н7 |
| Matrix: | Soil | | Lab Sample | ID: 1 | L030770005 | | |
| % Solid | ls: <u>77.2</u> | | Date Recei | ved: 1 | 1/03/2010 | | |
| | | | | | | | |
| Concent | ration Units | s (ug/L, ug or | mg/kg dry weigh | nt): mg | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q. | М | 7 |
| | 7429-90-5 | Aluminum | 1470 | | | P | ┪ |
| | 7440-36-0 | Antimony | | | ······································ | | - |
| | 7440-38-2 | Arsenic | | | | | _ |
| | 7440-39-3 | Barium | | | | 1 | 1 |
| | 7440-41-7 | Beryllium | | | | | 1 |
| | 7440-43-9 | Cadmium | | | | - | |
| | 7440-70-2 | Calcium | 369. | J | | P | 648 U KAA |
| | 7440-47-3 | Chromium | | | | | 31.01 |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 150000 | | D | P |] |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 477. | J | | P | 648U TH |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | - | | -21 |
| | 7440-09-7 | Potassium | 319. | J | | P | 6480 m |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | ··· | | 1,10,5 |
| | 7440-23-5 | Sodium | 38.8 | J | E | P | 64807 |
| | 7440-28-0 | Thallium | | | | | 6480 76 648 UJ 2/181 |
| | 7440-62-2 | Vanadium | | | | ļ | - |
| | 7440-66-6 | Zinc | | | | <u> </u> | 4 |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | ļ | _ |
| | L | | | | *** | <u> </u> | J , |
| Color Be | efore: ORANG | EClari | ty Before: | | Texture: M | EDIUM | ſ |
| Color At | fter: YELLOW | Clari | ty After: CLEAR | | - Artifacts: | | |
| | | | -1 <u></u> | | _ | | |
| Comments | 3: | | | | | | |
| E: Th | e reported v | alue is estir | mated due to the | prese | nce of inter | feren | nce. |

| MH35J7 |
|--------|
|--------|

| ah Code | a • ከአጥአር (| Case No.: 407 | 55 Modinos | No. | GDG. | 37 - 3 | WOENT. |
|---------|----------------|---------------|-----------------|-------------|-------------|--------------|--------------------------|
| ab cou | e. DATAC C | ase No.: 407 | mod. Ref. | мо.: _ | SDG | No.: 1 | 4H35H/ |
| atrix: | Soil | | Lab Sample | ID: 1 | L030770005 | | |
| Solida | s: <u>77.2</u> | | Date Recei | ved: 1 | 1/03/2010 | | |
| | | | ,, , | | <i>r</i> - | | |
| oncent | lation units | (ug/L, ug oi | mg/kg dry weigh | it): mg | / kg | | _ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 1 |
| | 7440-36-0 | Antimony | 1.2 | J | N | MS | 1.30 |
| | 7440-38-2 | Arsenic | 15.7 | | · NE | MS | ++ 7 |
| | 7440-39-3 | Barium | 18.7 | | N | MS | T+ 7 |
| | 7440-41-7 | Beryllium | 0.22 | J | E | MS | 0,650 |
| | 7440-43-9 | Cadmium | 0.58 | J | E | MS | 1.3 U 7 7 0.65 U 5 T T T |
| | 7440-70-2 | Calcium | | | | 1 | 01650 |
| | 7440-47-3 | Chromium | 1.8 | | | MS | |
| | 7440-48-4 | Cobalt | 1.0 | | * | MS | I-M |
| | 7440-50-8 | Copper | 104. | | *NE | MS | TIM |
| | 7439-89-6 | Iron | | | | 110 | 4 |
| | 7439-92-1 | Lead | 1850 | · | D* | MS | + TH |
| | 7439-95-4 | Magnesium | | | | 1220 | ~ |
| | 7439-96-5 | Manganese | 630. | | | MS | |
| | 7439-97-6 | Mercury | 1 | | | 1.0 | |
| | 7440-02-0 | Nickel | 1.3 | | E | MS | 十 加 |
| | 7440-09-7 | Potassium | | | | 1.0 | 7 |
| | 7782-49-2 | Selenium | 1.2 | Ĵ | | MS | 3.20 2 |
| | 7440-22-4 | Silver | 10.4 | | N | MS | + 7 |
| | 7440-23-5 | Sodium | 10.1 | | | 1720 | 7 TA |
| | 7440-28-0 | Thallium | 0.23 | J | | MS | 25 |
| | 7440-62-2 | Vanadium | 23.7 | - + | | MS | 7 |
| | 7440-66-6 | Zinc | 265. | | *E | MS | + 7 |
| | 57-12-5 | Cyanide | 2.05. | | · E | PIS | 7 , |
| | 3, 12 3 | Cyaniae | <u></u> | | | | 2/18 |
| | | | | | | | ı |
| | | | <u> </u> | | | | |
| lor Be | fore: BROWN | Clarit | ty Before: | | Texture: Co | DARSE | |
| lor Af | ter: YELLOW | Clarit | ty After: CLEAR | | Artifacts: | | |
| mments | | | | | | | |
| | | | ated due to the | | | | |

| MH35J8 |
|--------|
|--------|

| o code | : DATAC | Case No.: 407 | 55 Mod. Ref. | No.: | SDG | No.: I | 4H35H7 |
|---------|-------------|---------------|-----------------|--------|------------|----------|--------------|
| trix: | Soil | | Lab Sample | : ID: | 1030770006 | <u>-</u> | ···· |
| Solids | : 64.5 | | Date Recei | ved: | 11/03/2010 | | |
| | | | | | | | |
| ncentra | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): m | ıg/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | 2260 | | | P | 1 |
| 1 | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | 1 |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | |] |
| ſ | 7440-43-9 | Cadmium | | | | |] |
| | 7440-70-2 | Calcium | 405. | J | | P | 775∪ |
| | 7440-47-3 | Chromium | | | | | _ |
| I | 7440-48-4 | Cobalt | | | | | |
| - | 7440-50-8 | Copper | | | | | |
| L- | 7439-89-6 | Iron | 308000 | | D | P | j |
| į. | 7439-92-1 | Lead | | | | | |
| 1- | 7439-95-4 | Magnesium | 375. | J | | P | 7750 |
| - | 7439-96-5 | Manganese | | | | | |
| - | 7439-97-6 | Mercury | | | | | |
| · · · | 7440-02-0 | Nickel | | | | - | ر سرو م |
| - | 7440-09-7 | Potassium | 418. | J | | P | 7/56 |
| - | 7782-49-2 | Selenium | | | | | |
| - | 7440-22-4 | Silver | | | | ļ | 77-1 |
| H | 7440-23-5 | Sodium | 43.9 | J | E | P | 1150 |
| 1- | 7440-28-0 | Thallium | | | | - | 7750 7750 |
| | 7440-62-2 | Vanadium | · | | | | "/ |
| - | 7440-66-6 | Zinc | | | | - | |
| | 55 10 F | | | | | | |
| | 57-12-5 | Cyanide | | | | | |

| 84177 | ETO | |
|-------|-----|--|
| MHP | 5J8 | |

| Code | : DATAC C | Case No.: <u>407</u> | 55 Mod. Ref. | No.: _ | SDG 1 | No.: M | 1H35H7 |
|-------|-------------|----------------------|------------------|--------------|--------------|--------|---|
| rix: | Soil | | Lab Sample | ID: <u>1</u> | .030770006 | | |
| olids | : 64.5 | | Date Recei | ved: 1 | .1/03/2010 | | |
| | | | | _ | | | |
| centr | ation Units | (ug/L, ug or | mg/kg dry weigh | it): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 21 |
| | 7440-36-0 | Antimony | 12.0 | | N | MS | J+ 70.780. |
| | 7440-38-2 | Arsenic | 29.3 | | NE | MS | J+ 1 |
| | 7440-39-3 | Barium | 68.3 | | N | MS | J+ 7 |
| | 7440-41-7 | Beryllium | 0.16 | J | E | MS | 0.780. |
| | 7440-43-9 | Cadmium | 35.4 | | E | MS | 丁龙 |
| | 7440-70-2 | Calcium | | | | | 1 |
| | 7440-47-3 | Chromium | 2.2 | | | MS | |
| | 7440-48-4 | Cobalt | 0.41 | J | * | MS | 0.780 |
| | 7440-50-8 | Copper | 286. | | *NE | MS | J+ " |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 5080 | | D* | MS | 丁气 |
| | 7439-95-4 | Magnesium | | | | | |
| | 7439-96-5 | Manganese | 136. | | | MS | <u>'</u> |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 0.36 | J | E | MS | 0.78 U |
| | 7440-09-7 | Potassium | | | | |] |
| | 7782-49-2 | Selenium | 1.4 | J | | MS | 3.9 U |
| | 7440-22-4 | Silver | 27.5 | | N | MS | J n |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.10 | J | | MS | J- 9 |
| | 7440-62-2 | Vanadium | 49.7 | | | MS | |
| | 7440-66-6 | Zinc | 11300 | | D*E | MS | 7 2 |
| | 57-12-5 | Cyanide | | | | | 15 2/2 2/2 2/2 2/2 2/2 2/2 2/2 2/2 2/2 2/ |
| | | | | | | | 1 |
| | | | | | | | |
| or Re | fore, BROWN | Clari | ty Before: | | Texture: C | OARSE | |
| , | | | | | | | |
| or Af | ter: YELLOW | Clari | ty After: CLEAR | | _ Artifacts: | | |
| nents | | | | | | | |
| | | | mated due to the | | | ·C | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH35J9

| Lab Name | : ALS Labora | tory Group | | | | | <u></u> |
|--------------------|------------------------|------------------|-----------------|--------------------|----------------|-------------|---------------|
| Lab Code | : DATAC C | ase No.: 4075 | 5 Mod. Ref. | No.: | SDG 1 | No.: M | Н35Н7 |
| Matrix: | Soil | | Lab Sample | ID: 1030 | 770007 | | |
| ≷ Solids | : 88.8 | | Date Recei | ved: <u>11/0</u> 3 | 3/2010 | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): mg/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 1130 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | 207 |
| | 7440-70-2 | Calcium | 57.7 | J | | Р | 563UF |
| | 7440-47-3 | Chromium | | | | ļ | |
| • | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 8170 | | | P | |
| | 7439-92-1 | Lead | | | | P | 5630 m |
| | 7439-95-4 | Magnesium | 45.9 | J | | P | 5630 |
| | 7439-96-5 | Manganese | | | | - | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 714. | | | P | T+ 2 |
| | 7440-09-7 | Potassium | /14. | | | F | J+ 2 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver Sodium | 22.3 | J | Ė | P | 563 UT |
| | 7440-23-5 7440-28-0 | Thallium | 22.5 | | В | | 563UJ 2/18 |
| | 7440-28-0 | Vanadium | | | | | 2/18 |
| | 7440-62-2 | Zinc | | · · | | | |
| | 57-12-5 | Cyanide | | | | | |
| | 37-12-3 | Cyanitae | | | | | |
| | | | | | | 1 | |
| | | <u> </u> | | | | | |
| Color Be | fore: YELLOW | Clarit | y Before: | Те | exture: M | MUIDE | |
| | ter: YELLOW | · | y After: CLEAR | - | - rtifacts: | | |
| | | | | | | | |
| Comments E: The | | alue is estim | ated due to the | presence | of inter | rferen | ce. |
| E: The | e reported v | alue is estima | ated due to the | presence | of inter | rferen | ce. |

| мн35J9 | |
|--------|--|
|--------|--|

| cix: | Soil | | Lab Sample | ID: <u>1</u> | 030770007 | | |
|-------|--------------|---------------|-------------------|--------------|-----------|--------|-------------------------|
| olids | s: 88.8 | | Date Recei | ved: 1 | 1/03/2010 | | · · · · · · |
| | | | | _ | <u></u> | | |
| centr | ration Units | s (ug/L, ug o | r mg/kg dry weigh | ıt): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | | | | | 1 |
| | 7440-36-0 | Antimony | 13.5 | | N | MS | J+ 74 5+ 76 0.560 |
| | 7440-38-2 | Arsenic | 34.9 | | NE | MS | J+ 7 |
| | 7440-39-3 | Barium | 83.8 | | N | MS | J+ 1 |
| | 7440-41-7 | Beryllium | 0.21 | J | E | MS | 0.560 |
| | 7440-43-9 | Cadmium | 5.0 | | Е | MS | τ |
| | 7440-70-2 | Calcium | | | | | 1 ~ |
| | 7440-47-3 | Chromium | 1.3 | | | MS | |
| | 7440-48-4 | Cobalt | 0.19 | J | * | MS | 0.560 |
| | 7440-50-8 | Copper | 211. | | *NE | MS | T+ 7 |
| | 7439-89-6 | Iron | | | | | 7 |
| | 7439-92-1 | Lead | 3880 | | D* | MS | 丁本 |
| | 7439-95-4 | Magnesium | | | | | |
| | 7439-96-5 | Manganese | 423. | | | MS | - |
| | 7439-97-6 | Mercury | | | | | , |
| | 7440-02-0 | Nickel | 0.19 | J | E | MS | 2.80 |
| | 7440-09-7 | Potassium | | | | | |
| | 7782-49-2 | Selenium | 1.7 | J | | MS | 2.80 |
| | 7440-22-4 | Silver | 34.6 | | N | MS | J |
| | 7440-23-5 | Sodium | | | | | · |
| | 7440-28-0 | Thallium | 0.61 | | | MS | 576 |
| | 7440-62-2 | Vanadium | 7.8 | | | MS | F |
| | 7440-66-6 | Zinc | 1400 | | D*E | MS | J |
| | 57-12-5 | Cyanide | | | **** | | F M 2/1 |
| | | | | | | | |
| r Be | fore: YELLOW | v Clari | ty Before: | | Texture: | MEDIUM | |
| | | | ty After: CLOUDY | | _ | | |
| | | ~~~ | -1 | - | | | |
| ents | : | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |
| | | |

| | | | | | | MH35K0 | | | |
|--------------------------------|---------------------------------|----------------|---|--------------------|---|-------------|-----------------|------------|--|
| Lab Name: ALS Laboratory Group | | | Contract: | Contract: EPW09036 | | | | | |
| Lab Code | Lab Code: DATAC Case No.: 40755 | | 5 Mod. Ref. | Mod. Ref. No.: | | | SDG No.: MH35H7 | | |
| Matrix: Soil | | Lab Sample | Lab Sample ID: 1030770008 | | | | | | |
| % Solids | s: <u>90.7</u> | | Date Recei | ved: <u>11</u> | /03/201 | LO | | _ | |
| Concenti | ration Units | (ug/L, ug or | mg/kg dry weigh | it): mg/ | kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | | |
| | 7429-90-5 | Aluminum | 1450 | | *************************************** | P | | | |
| | 7440-36-0 | Antimony | | | | | 1 | | |
| | 7440-38-2 | Arsenic | | | | | 1 | | |
| | 7440-39-3 | Barium | *************************************** | | | | - | | |
| | 7440-41-7 | Beryllium | | | | | 1 | | |
| | 7440-43-9 | Cadmium | | | | | 1 | 71 | |
| | 7440-70-2 | Calcium | 259. | J | | P | 551 | UM | |
| | 7440-47-3 | Chromium | | | **** | | 100, | _ | |
| | 7440-48-4 | Cobalt | · · · · · · · · · · · · · · · · · · · | | | | 1 | | |
| | 7440-50-8 | Copper | | | ***** | | 1 | | |
| | 7439-89-6 | Iron | 16900 | | | P | | | |
| | 7439-92-1 | Lead | ***** | | | | - | | |
| | 7439-95-4 | Magnesium | 72.4 | J | · | P | 551 | UH | |
| | 7439-96-5 | Manganese | | | · | | J J , | | |
| | 7439-97-6 | Mercury | | | | | 1 | | |
| | 7440-02-0 | Nickel | | | ~~~~ | | † | | |
| | 7440-09-7 | Potassium | 1240 | | | P | T+ | H | |
| | 7782-49-2 | Selenium | | | | | 7 | H | |
| | 7440-22-4 | Silver | | | | | | | |
| | 7440-23-5 | Sodium | 59.0 | J | E | P | 551 | UTT | |
| | 7440-28-0 | Thallium | 03.0 | | | - 1 | , ,,, | U5 % H18/1 | |
| | 7440-62-2 | Vanadium | | | | | - | 41811 | |
| | 7440-66-6 | Zinc | | | | | | | |
| | 57-12-5 | Cyanide | | | | | | | |
| | | | ***** | | | | | | |
| | | | | | • • | | 1 | | |
| Color Be | fore: BROWN | Clarit | y Before: | , | Textur | e. MEDIUM | J | | |
| | | | | | | | | - | |
| LOIOT AI | ter: YELLOW | Clarity | y After: CLEAR | | Artifa | cts: | | - | |
| Comments | : | | | | | | | | |
| E: The | e reported v | alue is estima | ated due to the | presenc | e of i | nterferen | ce. | | |
| | <u> </u> | | | 1 = 100.10 | | | | - | |
| | | | | | | | | _ | |
| | | | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| MH35KO | |
|--------|--|

| atrix: Solids: oncentrat | Soil 90.7 | (ug/L, ug or Analyte Aluminum Antimony Arsenic | 5 Mod. Ref. Lab Sample Date Recei mg/kg dry weigh Concentration | ID: | 11/03/2010 | No.: M | 1Н35Н7 |
|--------------------------|---|--|---|---------|---|----------------|---------|
| Solids: | 90.7 tion Units CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 | Analyte Aluminum Antimony | Date Receimg/kg dry weigh | ved: | 11/03/2010 g/kg | М | |
| oncentrat | CAS No. (429-90-5) (440-36-0) (440-38-2) (440-39-3) | Analyte Aluminum Antimony | mg/kg dry weigh | ıt): mo | g/kg | М | |
| 7 7 7 | CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 | Analyte Aluminum Antimony | mg/kg dry weigh | ıt): mo | g/kg | М | |
| 7 7 7 | CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 | Analyte Aluminum Antimony | Concentration | Γ | - - | М | |
| 7 7 7 | CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 | Analyte Aluminum Antimony | Concentration | Γ | - - | М | ī |
| 7 7 | 7429-90-5 7440-36-0 7440-38-2 7440-39-3 | Aluminum Antimony | | С | Q | М | i |
| 7 7 | 440-36-0 440-38-2 440-39-3 | Antimony | 11.7 | | *************************************** | | |
| 7 | 440-38-2 440-39-3 | | 1.17 | | | | |
| | 440-39-3 | Arsenic | | | N | MS | I In |
| Γ ₇ | | | 38.6 | | NE | MS | 7+ 2 |
| 1 ' | 440-41-7 | Barium | 97.2 | | N | MS | 7+ 7 |
| 7 | 1 TT U | Beryllium | 0.32 | J | E | MS | 0.55 U |
| 7 | 440-43-9 | Cadmium | 7.6 | | E | MS | J |
| 7 | 440-70-2 | Calcium | | | | | |
| 7 | 440-47-3 | Chromium | 0.97 | J | | MS | 1.1 0 |
| 7 | 440-48-4 | Cobalt | 0.23 | J | * | MS | 0.550 |
| 7 | 440-50-8 | Copper | 471. | | *NE | MS | J+ " |
| 7 | 439-89-6 | Iron | *************************************** | | | - | 7 |
| | 439-92-1 | Lead | 4920 | | D* | MS | J |
| 7 | 439-95-4 | Magnesium | | | | | 7 |
| 7 | | Manganese | 122. | | | MS | - |
| | | Mercury | | | · | | |
| 7 | | Nickel | 0.17 | J | . E | MS | 13.551 |
| 7 | 440-09-7 | Potassium | | | | | 0.50 |
| | | Selenium | 1.8 | J | | MS | 2.80 |
| | | Silver | 54.0 | | N | MS | 7 O |
| | | Sodium | | | | | 7 |
| <u> </u> | | Thallium | 0.85 | | | MS | T |
| <u> </u> | | Vanadium | 12.0 | | ···· | MS | I |
| - | | Zinc | 2100 | | D*E | MS | 2 |
| | | Cyanide | | | | | |
| | | | | | | | 71.0 |
| | | | | | | | 2/18 |
| lor Befo | re: YELLOW | Clarity | y Before: | , | Texture: ME | | |
| | | | | | _ reacute. Mr | TOTOM | |
| lor Afte | r: BROWN | Clarity | y After: CLOUDY | | _ Artifacts: | | |
| mments: | | | | | | | |
| | reported wa | lue is estima | ted due to the | nreen | nce of inter | forona | 10 |

| EPA | SAMPLE | ио. |
|-----|--------|-----|
| | | |

| 1 | 4H35K1 | |
|---|--------|--|
| 1 | 4H35K1 | |

| b Code | DATAC | Case No.: 4075 | Mod. Ref. | No.: | SDG 1 | No.: 1 | мн35н7 |
|----------|---|----------------|-----------------|--------|---------------|--------------|---------|
| trix: | Soil | | Lab Sample | ID: | 1030770009 | | |
| Solids | 87.8 | | Date Recei | ved: | 11/03/2010 | | |
| | | | | | | | |
| ncentra | ation Units | (ug/L, ug or | mg/kg dry weigh | .t): m | g/kg | | ٦ |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 2020 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | ļ | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | <u> </u> | 1 |
| | 7440-70-2 | Calcium | 807. | | | P | _ |
| | 7440-47-3 | Chromium | | | | | _ |
| | 7440-48-4 | Cobalt | | | | | 4 |
| ļ | 7440-50-8 | Copper | | | | <u> </u> | - |
| | 7439-89-6 | Iron | 21500 | | | P | 1 |
| | 7439-92-1 | Lead | 0 | | | | |
| } | 7439-95-4 | Magnesium | 950. | | | P | |
|] | 7439-96-5 | Manganese | | | | | |
| ļ | 7439-97-6 | Mercury | | | | | |
| ļ | 7440-02-0 | Nickel | | | | | - 7 |
| ļ | 7440-09-7 | Potassium | 1460 | | | P | 1 1 7 7 |
| I | 7782-49-2 | Selenium | | | | ļ | 1 |
| 1 | 7440-22-4 | Silver | | | | | F10 117 |
| ŀ | 7440-23-5 | Sodium | 37.7 | J | E | P | J+ 7 |
| | 7440-28-0 | Thallium | | | | 1 | 2 |
| <u> </u> | 7440-62-2 | Vanadium | | | | | 1 , |
| | 7440-66-6 | Zinc | | | | | 1 |
| 1 | 57-12-5 | Cyanide | | | | - | - |
| ļ | *************************************** | | | | | | 1 |
| L | | | | | | ! | J |
| or Bef | ore: ORANGI | Clarit | y Before: | | Texture: M | EDIUM | |
| or Aft | er: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | |
| monts: | | | | | | | |
| ments: | | | | | <i>~</i> | _ | |
| 3: The | reported v | value is estim | ated due to the | pres | ence of inter | feren | ce. |

EPA SAMPLE NO.

| MH3 | 5121 | |
|-------|--------------|--|
| כחויו | $\Delta V T$ | |

| Lab Name | : ALS Labora | tory Group | Contract: | EPW09 | 036 | | | | |
|----------|--------------|-----------------|----------------|--------|---------------------------------------|---------|---------------|------|----------------|
| ab Code | : DATAC C | Case No.: 40755 | Mod. Ref. | No.: | | SDG No | .: <u>M</u> H | 35H7 | |
| latrix: | Soil | | Lab Sample | ID: | 10307700 | 09 | | | |
| s Solids | : 87.8 | | Date Recei | ved: | 11/03/20 | 10 | | | |
| | | | | | | | | | |
| Concentr | ation Units | (ug/L, ug or m | g/kg dry weigh | ıt): m | ıg/kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | | М | | |
| | 7429-90-5 | Aluminum | | | | | | | ~ |
| | 7440-36-0 | Antimony | 0.26 | J | N | | MS | 1.1 | U TH |
| | 7440-38-2 | Arsenic | 90.2 | | NE | | MS | 7+ | 71 |
| | 7440-39-3 | Barium | 72.1 | | N | | MS | 7+ | M |
| | 7440-41-7 | Beryllium | 0.30 | J | E | | MS | 0.5 | 70J |
| | 7440-43-9 | Cadmium | 1.1 | | E | | MS | Т | m |
| | 7440-70-2 | Calcium | | | | | | ٦ | -M + W M |
| | 7440-47-3 | Chromium | 2.3 | | | | MS | | 4 |
| | 7440-48-4 | Cobalt | 0.88 | | * | | MS | 1 | -77 |
| | 7440-50-8 | Copper | 111. | | *NE | | MS | 1. | + 2 |
| | 7439-89-6 | Iron | | | | | | | |
| | 7439-92-1 | Lead | 4510 | | D* | | MS | J | m |
| | 7439-95-4 | Magnesium | - | | | | | | |
| | 7439-96-5 | Manganese | 843. | | D | | MS | | - |
| | 7439-97-6 | Mercury | | | | | ı | _ | 71 |
| | 7440-02-0 | Nickel | 0.74 | | E | | MS | I | m |
| | 7440-09-7 | Potassium | | | • | | | | |
| | 7782-49-2 | Selenium | 1.3 | J | | | MS ; | 2.8 | U |
| | 7440-22-4 | Silver | 8.4 | | N | | MS | I | The |
| | 7440-23-5 | Sodium | | | , , , , , , , , , , , , , , , , , , , | | | • | |
| | 7440-28-0 | Thallium | 1.2 | | D | | MS | | 2/ |
| | 7440-62-2 | Vanadium | 17.5 | | | | MS | F | TN 2/18 |
| į | 7440-66-6 | Zinc | 319. | | *E | | MS | Ī | pu |
| | 57-12-5 | Cyanide | | | | | | ~ | 01.0 |
| | | | | | | | | | W 18 |
| | | | | | | | | | • |
| olor Be: | fore: ORANGE | Clarity | Before: | | Textu | re: MED | IUM | | |
| olor Af | er: GREEN | Clarity | After: CLOUDY | 7 | Artifa | acts: | | | |
| omments | | | | | | | | | |
| | | .1 | | | | | | _ | |
| Fit The | reported va | alue is estimat | ea aue to the | pres | ence of : | ınterfe | rence | ∍. | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | мн35к2 | |

| Lab Name | e: ALS Labora | atory Group | Contract: 1 | EPW090 | 36 | | | |
|-----------|----------------|--------------|-------------------|---------|-------------|-------------|--------|-------------|
| | | | 55 Mod. Ref. | | | SDG No.: M | H35H7 | _ |
| Matrix: | | | Lab Sample | | | | | _ |
| % Solida | 00 E | | Date Recei | | 1 /03 /20 | 10 | | _ |
| g Soria: | s: <u>90.5</u> | | Date Recei | vea: _ | 1/03/20 | 10 | | - |
| Concent: | ration Units | (ug/L, ug oi | r mg/kg dry weigh | nt): mg | /kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 11200 | | | P | | |
| | 7440-36-0 | Antimony | 11200 | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1360 | | | P | | |
| | 7440-47-3 | Chromium | | | ****** | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 36000 | | | P | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 11100 | | | P | | |
| - | 7439-96-5 | Manganese | | | | | · | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | " 24 |
| | 7440-09-7 | Potassium | 872. | | | P | T+ | * ** |
| | 7782-49-2 | Selenium | | | | | T+ 552 | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 105. | J | E | P | 552 | UJ |
| | 7440-28-0 | Thallium | | | | | • | 11.0 |
| | 7440-62-2 | Vanadium | | | | | | 2/18/ |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | <u> </u> | | | | | | |
| Color Be | efore: BROWN | Clari | ty Before: | | Textu | re: MEDIUM | | |
| Color Af | fter: YELLOW | Clari | ty After: CLEAR | | - Artifa | acts: | | _ |
| 00101 111 | 1222011 | | <u> </u> | | | | | - |
| Comments | 3: | | | | | | | |
| E: Th | e reported v | alue is esti | mated due to the | prese | nce of : | interferenc | e. | |
| | | | | • | | | | - |

EPA SAMPLE NO.

| MH35K2 |
|--------|
|--------|

| x: S | Soil | | Lab Sample | Lab Sample ID: | | 1030770010 | | |
|--------|-----------|----------------|-------------------|----------------|-------------|------------|---------------------------------|--|
| ids: 9 | 0.5 | | Date Recei | ved: | 11/03/2010 | | | |
| ntrat: | ion Units | s (ug/L, ug or | r mg/kg dry weigh | ıt): n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| 74 | 29-90-5 | Aluminum | | | | | | |
| 74 | 40-36-0 | Antimony | 0.25 | J | N | MS | 1.1 U J+ 0.55 U 0.55 U | |
| 74 | 40-38-2 | Arsenic | 96.8 | | NE | MS | ++ 7 | |
| 74 | 40-39-3 | Barium | 34.9 | | N | MS | 1 7 7 | |
| 74 | 40-41-7 | Beryllium | 0.20 | J | E | MS | D.550 | |
| 74 | 40-43-9 | Cadmium | 0.55 | | E | MŞ | 0.550 | |
| 74 | 40-70-2 | Calcium | | | | | 1 | |
| 74 | 40-47-3 | Chromium | 11.9 | | | MS | | |
| 74 | 40-48-4 | Cobalt | 5.5 | | * | MS | T | |
| 74 | 40-50-8 | Copper | 47.1 | | *NE | MS | T+ 7 | |
| 74 | 39-89-6 | Iron | | | - | | 1 ~ | |
| 74 | 39-92-1 | Lead | 1030 | | D* | MS | 7 7 | |
| 74 | 39-95-4 | Magnesium | | • | ··········· | | 1 ~ | |
| 74 | 39-96-5 | Manganese | 1620 | | D | MS | | |
| 74 | 39-97-6 | Mercury | - | | ~~~~~ | | ر ا | |
| 74 | 40-02-0 | Nickel | 5.3 | | E | MS | T 7 | |
| 74 | 40-09-7 | Potassium | | | - **** | | 7 | |
| 77 | 82-49-2 | Selenium | 0.60 | J | | MS | 2.81) | |
| 74 | 40-22-4 | Silver | 5.7 | | N | MS | 7.80 | |
| 74 | 40-23-5 | Sodium | | | | | 1 - | |
| 74 | 40-28-0 | Thallium | 0.36 | J | D | MS | 1 7 - | |
| 74 | 40-62-2 | Vanadium | 62.1 | ** | | MS | 1 | |
| 74 | 40-66-6 | Zinc | 187. | | *E | MS | 1 + 1 | |
| 57 | -12-5 | Cyanide | | | | | 7 | |
| | | | | | | | | |
| Befor | e: BROWN | . Clari | ty Before: | | Texture: 1 | MEDIUM | | |
| | | | ty After: CLOUDY | | | | | |
| ts: | | - | | | | | | |

EPA SAMPLE NO.
MH35K3

| | | | | | | MH35 | K3 | |
|----------|-------------------|----------------|-----------------|--------------------------------|---|--------|------------|--|
| Lab Nam | e: ALS Labora | ntory Group | Contract: | EPW09 | 036 | | | |
| Lab Cod | e: <u>DATAC</u> (| Case No.: 4075 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35H7 | | | | |
| Matrix: | Soil | | Lab Sample | ID: | 1030770011 | | | |
| % Solid | s: 93.4 | | Date Recei | ved: | 11/03/2010 | | | |
| Concent: | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mo | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | 665. | | | P | 1 | |
| | 7440-36-0 | Antimony | | | | | 1 | |
| | 7440-38-2 | Arsenic | | | | | 1 | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | 535 v | |
| | 7440-70-2 | Calcium | 34.8 | J | ** | P | 535 U | |
| | 7440-47-3 | Chromium | | | | |] | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | 1 | |
| | 7439-89-6 | Iron | 22200 | | | Р | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | . 38.2 | J | | P | 535 U | |
| • • | 7439-96-5 | Manganese | | | | | Q | |
| | 7439-97-6 | Mercury | | | · · · · · · · · · · · · · · · · · · · | | İ | |
| | 7440-02-0 | Nickel | | | | |] | |
| | 7440-09-7 | Potassium | 1200 | | | P | T+ 1 | |
| | 7782-49-2 | Selenium | | | | | 1 7 | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 53.9 | J | E | P | 535 UJ | |
| | 7440-28-0 | Thallium | | | | | 535 U] | |
| | 7440-62-2 | Vanadium | | | | | 2/1 | |
| | 7440-66-6 | Zinc | | | , | | · | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Color Be | efore: YELLOW | Clarit | cy Before: | | Texture: N | MEDIUM | | |
| Color Af | fter: YELLOW | Clarit | y After: CLEAR | | Artifacts | : | | |
| Comments | z • | | | | | | | |
| | • | alue is estim | ated due to the | prese | ence of inter | rferen | <u>ce.</u> | |
| | | | | | | | | |
| - | | | · | | · | | | |
| | | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| - | |
|---|--------|
| | MH35K3 |

| ab Code: DATAC | 1030770011 11/03/2010 | М | 75554 7554 7554 7554 | カカカナル |
|--|--|-------------------------|-------------------------------|-----------|
| Solids: 93.4 Date Received: CAS No. Analyte Concentration C | 11/03/2010 ng/kg Q N NE N E E * D*NE | MS MS MS MS MS MS MS MS | 55554 1.54 1.54 1.54 | カカオケル |
| CAS No. Analyte Concentration C 7429-90-5 Aluminum 7440-36-0 Antimony 12.2 7440-38-2 Arsenic 55.2 7440-39-3 Barium 81.3 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-92-1 Lead 15500 7439-92-1 Lead 15500 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | ng/kg Q N NE N E T D*NE | MS MS MS MS MS MS MS MS | 75554 1.54 T | NAT TUNE |
| CAS No. Analyte Concentration C 7429-90-5 Aluminum 12.2 7440-36-0 Antimony 12.2 7440-38-2 Arsenic 55.2 7440-39-3 Barium 81.3 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 0.0 7440-70-2 Calcium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 15500 7439-95-4 Magnesium 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 3.4 7440-22-4 Silver 113. | Q N NE N E E T | MS MS MS MS MS MS MS MS | 75554 1.54 1.54 1.54 | カガガナル |
| 7429-90-5 Aluminum 7440-36-0 Antimony 12.2 7440-38-2 Arsenic 55.2 7440-39-3 Barium 81.3 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 7440-47-3 Chromium 0.86 J 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | N NE N E E T * D*NE | MS MS MS MS MS MS MS MS | 75554 1.154 T | NATUM NOW |
| 7440-36-0 Antimony 12.2 7440-38-2 Arsenic 55.2 7440-39-3 Barium 81.3 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 0.86 J 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 15500 7439-92-1 Lead 15500 7439-95-4 Magnesium 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 3.4 7440-22-4 Silver 113. | NE N E E * D*NE | | 75554 1.54 TO 5 TO 54 | NA TON |
| 7440-38-2 Arsenic 55.2 7440-39-3 Barium 81.3 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 0.86 J 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 15500 7439-92-1 Lead 15500 7439-95-4 Magnesium 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 3.4 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | NE N E E * D*NE | | JJJ54 105 1 1054 T | NA TON |
| 7440-38-2 Arsenic 55.2 7440-39-3 Barium 81.3 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 0.86 J 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 15500 7439-92-1 Lead 15500 7439-95-4 Magnesium 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7742-49-2 Selenium 3.4 7440-22-4 Silver 113. | E E * D*NE | | 7555 1.54 1.54 1.54 | NA STA |
| 7440-41-7 Beryllium 0.11 J 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | E E * D*NE | | 1.10 1.10 0.54 T | |
| 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | * D*NE | | 0.54 1.10 0.54 T | U TO THE |
| 7440-43-9 Cadmium 40.0 7440-70-2 Calcium 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | * D*NE | | J 1.10 0.54 J+ | I THE |
| 7440-70-2 Calcium 7440-47-3 Chromium 0.86 J 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | * D*NE | | 1.10 0.54 J+ | 1 UM |
| 7440-48-4 Cobalt 0.35 J 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | D*NE | | 1.10 0.54 J+ | I U THE |
| 7440-50-8 Copper 4600 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | D*NE | | 0.54 J+ | U M |
| 7439-89-6 Iron 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | | | J+ J | M |
| 7439-92-1 Lead 15500 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | D* | | 7 7 | |
| 7439-95-4 Magnesium 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | D* | | J | |
| 7439-96-5 Manganese 177. 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | | | ~ | n |
| 7439-97-6 Mercury 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | | | | |
| 7440-02-0 Nickel 0.27 J 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | | MS | | |
| 7440-09-7 Potassium 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | ***** | | | |
| 7782-49-2 Selenium 3.4 7440-22-4 Silver 113. | E | MS | 0.54 TX | 405 |
| 7440-22-4 Silver 113. | | | | |
| | · · · · · · · · · · · · · · · · · · · | MS | | |
| 7440-23-5 Sodium | DN | MS | -Z K | <u> </u> |
| | | | | Show |
| 7440-28-0 Thallium 0.73 | | MS | | |
| 7440-62-2 Vanadium 7.1 | | MS | T | The |
| 7440-66-6 Zinc 10400 | D*E | MS | F | M |
| 57-12-5 Cyanide | | | ٠, | m 2/18 |
| | | | | 700 |
| | | | | |
| lor Before: GREEN Clarity Before: | Texture: ME | DIUM | | _ |
| lor After: GRAY Clarity After: CLOUDY | Artifacts: | | | |
| | _ | | . | |
| nments: E: The reported value is estimated due to the presented to the pre | | | | |

|--|

| миз | 5K4 |
|--------|------|
| יייייי | OT/4 |

| il .5 on Units AS No. 9-90-5 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | (ug/L, ug or Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium | Lab Sample Date Recei mg/kg dry weigh Concentration 13000 | ved: 1 | 1/03/2010 | M P | (H35H7 |
|--|---|---|---------|------------------|--------|-------------|
| .5 AS No. 9-90-5 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | Analyte Aluminum Antimony Arsenic Barium Beryllium | Date Recei mg/kg dry weigh Concentration | ved: 1: | 1/03/2010 /kg | | |
| AS No. 9-90-5 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 | Analyte Aluminum Antimony Arsenic Barium Beryllium | mg/kg dry weigh | | /kg | | |
| AS No. 9-90-5 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | Analyte Aluminum Antimony Arsenic Barium Beryllium | Concentration | _ | | | |
| 9-90-5 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | Aluminum Antimony Arsenic Barium Beryllium | | С | Q | | |
| 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | Antimony Arsenic Barium Beryllium | 13000 | | | P | |
| 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | Antimony Arsenic Barium Beryllium | | | | | |
| 0-38-2 0-39-3 0-41-7 0-43-9 0-70-2 | Arsenic Barium Beryllium | | | | | 1 |
| 0-41-7 0-43-9 0-70-2 | Beryllium | | | | | |
|)-43-9)-70-2 | | · · · · · · · · · · · · · · · · · · · | | | | |
|)-70-2 | | l l | | | | |
| | | | | | | |
| | Calcium | 2030 | | | P | l |
|)-47-3 | Chromium | | | · | | l |
| -48-4 | Cobalt | | | | | İ |
|)-50-8 | Copper | | | | | İ |
| 9-89-6 | Iron | 25200 | | | P | İ |
| 9-92-1 | Lead | | | | | i |
| 9-95-4 | Magnesium | 12700 | | | P | |
| 9-96-5 | Manganese | | | | | |
| 97-6 | Mercury | | | | | |
| 0-02-0 | Nickel | | | | | - |
|)-09-7 | Potassium | 671. | | | P | J+ ' |
| 2-49-2 | Selenium | | | | | J+ 7 |
| 1-22-4 | Silver | | | | | |
| 1-23-5 | Sodium | 64.3 | J | E | P | 541 U 21 |
| 1-28-0 | Thallium | | | | | . 1 |
| -62-2 | Vanadium | | | | | 21 |
| -66-6 | Zinc | | | | | |
| .2-5 | Cyanide | | | | \bot | |
| | | | ' | | 1 1 | |
| | -89-6 -92-1 -95-4 -96-5 -97-6 -02-0 -09-7 -49-2 -22-4 -23-5 -28-0 -62-2 -66-6 | 1-89-6 | 1-89-6 | 1-89-6 | 1-89-6 | 1-89-6 |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35K4 | |

| | | | | | L | MH351 | N.4 |
|----------|--------------|------------------------|------------------|---------|--------------|------------|---------|
| Lab Name | : ALS Labora | atory Group | Contract: | EPW090 |)36 | | |
| ab Code | : DATAC C | Case No.: <u>407</u> 5 | Mod. Ref. | йо.: _ | | SDG No.: M | 1H35H7 |
| atrix: | Soil | | Lab Sample | ID: 1 | 103077001 | .2 | |
| Solids | : 92.5 | | Date Recei | ved: 1 | 11/03/201 | .0 | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 74 |
| | 7440-36-0 | Antimony | 0.54 | J | N | MS | 1.10 |
| | 7440-38-2 | Arsenic | 32.8 | | NE | MS | J+ M |
| | 7440-39-3 | Barium | 46.1 | | N | MS | 0.54 US |
| | 7440-41-7 | Beryllium | 0.35 | J | E | MS | 0.5403 |
| | 7440-43-9 | Cadmium | 0.70 | | E | MS | J W |
| | 7440-70-2 | Calcium | | | | | " |
| | 7440-47-3 | Chromium | 10.0 | | | MS | l L |
| | 7440-48-4 | Cobalt | 4.6 | | * | MS | 7 |
| | 7440-50-8 | Copper | 33.1 | | *NE | MS | J+ 12 |
| | 7439-89-6 | Iron | | | | | 7 |
| | 7439-92-1 | Lead | 2260 | | D* | MS | Th |
| | 7439-95-4 | Magnesium | | | | | 7 |
| | 7439-96-5 | Manganese | 3280 | | D | MS | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 5.3 | | E | MS | 丁万 |
| • | 7440-09-7 | Potassium | | | _ | - | 7 |
| | 7782-49-2 | Selenium | 0.83 | J | | MS | 2.70 " |
| | 7440-22-4 | Silver | 4.6 | - | N | MS | 7 4 |
| | 7440-23-5 | Sodium | | | | | J |
| | 7440-28-0 | Thallium | 0.38 | | | MS | T- 2 |
| | 7440-62-2 | Vanadium | 60.8 | | | MS | I T |
| | 7440-66-6 | Zinc | 210. | + | *E | MS | + n |
| • | 57-12-5 | Cyanide | | | | *** | 1 01.0 |
| | J1 12 J | Oyumido | | | | | 7/10 |
| | | | | | | | |
| lor Be | fore: BROWN | Clarit | y Before: | - | _ Textur | e: MEDIUM | |
| olor Af | ter: BROWN | Clarit | ty After: CLOUDY | , | _ Artifa | cts: | |
| omments | • | | | | | | |
| | | . 7 | ated due to the | | · . | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35K5 | |

| Lab Code: Matrix: % Solids: | DATAC C Soil 90.3 | tory Group ase No.: 4075 | | No.: | | SDG No. | .: MH | 35н7 |
|-----------------------------|-------------------|--------------------------|---------------------------------------|-------|--------------|---------|-------|----------------|
| % Solids: | 90.3 | | H11 | | | | | |
| % Solids: | | | - | TD: | 10307700 | 13 | | |
| | | | Date Recei | | | | | |
| Concentra: | | | Date Recei | vea: | 11/03/20 | T.O. | | |
| oonconcra | tion Units | (ug/L, ug or | mg/kg dry weigh | t): n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | | М | |
| | 7429-90-5 | Aluminum | 906. | | | | P | |
| | 7440-36-0 | Antimony | | | | | | |
| 7 | 7440-38-2 | Arsenic | | | | | | |
| - | 7440-39-3 | Barium | | | | | | |
| Ţ- | 7440-41-7 | Beryllium | | | | | | |
| <u> </u> | 7440-43-9 | Cadmium | | | | | | _ 7 |
| | 7440-70-2 | Calcium | 48.6 | J | | | Р | 554 U 7 |
| 7 | 7440-47-3 | Chromium | | | | | | |
| 7 | 7440-48-4 | Cobalt | | | | | | |
| 7 | 7440-50-8 | Copper | , ,,,,, <u>,</u> | | | | | |
| 7 | 7439-89-6 | Iron | 7700 | | | | P | |
| 7 | 7439-92-1 | Lead | | | | | | 7 |
| | 7439-95-4 | Magnesium | 118. | J | | | P | 554 U 7 |
| | 7439-96-5 | Manganese | | | | | | |
| 7 | 7439-97-6 | Mercury | · · · · · · · · · · · · · · · · · · · | | | | | |
| ⊢ | 7440-02-0 | Nickel | | | | | | |
| . — | 7440-09-7 | Potassium | 961. | | | | P | J+ H |
| 7 | 7782-49-2 | Selenium | | | | | | • |
| <u> </u> | 7440-22-4 | Silver | | | | | | |
| <u> </u> | 7440-23-5 | Sodium | 53.1 | J | Е | | P | 554 UT |
| | 7440-28-0 | Thallium | | | | | | J+ 4 554 Uj |
| | 7440-62-2 | Vanadium | | | | | | 41 |
| | 7440-66-6 | Zinc | | | | | | |
| ٠ | 57-12-5 | Cyanide | | | | | | ٠, |
| - | | | | | | | | |
| , L | | | | L | | | | |
| Color Bef | ore: GRAY | Clarit | y Before: | | Textu | ce: MED | IUM | |
| Color Aft | er: YELLOW | Clarit | y After: CLEAR | | Artifa | acts: _ | | |
| Oamma | | | | | | _ | | — |
| Comments: | renorted w | alue is estim | ated due to the | pres | sence of | interfe | renc | e. |
| E. 1116 | Tehorred A | TTUE TO COLIN | acca day to the | Pros | , O,100 OL - | | 0110 | |

EPA SAMPLE NO.
MH35K5

| | : ALS Labora | tory Group | Contract: 1 | | | | | |
|----------|----------------|----------------|-----------------|--------------------------------|--------------|--------|--------------------------------|--|
| ah Cada | | <u>-</u> | Contract: | EPW090 | 136 | | | |
| an code | : DATAC C | Case No.: 4075 | 5 Mod. Ref. | Mod. Ref. No.: SDG No.: MH35H7 | | | | |
| atrix: | Soil | į. | Lab Sample | Lab Sample ID: 1030770013 | | | | |
| Solids | : 90.3 | | Date Recei | ved: 1 | 1/03/2010 | | | |
| | | | | • | | | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | ∫/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] | |
| | 7429-90-5 | Aluminum | | | | | 1 _ | |
| | 7440-36-0 | Antimony | 0.99 | J | N | MS | 1.10 | |
| | 7440-38-2 | Arsenic | 13.6 | | NE | MS | 1.10 T+ 0.5503 0.5503 | |
| | 7440-39-3 | Barium | 37.1 | | N | MS |] J + 7 | |
| | 7440-41-7 | Beryllium | 0.13 | J | E | MS |] 0.55 UJ | |
| | 7440-43-9 | Cadmium | 0.53 | | E | MS | 0.550 | |
| i | 7440-70-2 | Calcium | | | | |] , | |
| | 7440-47-3 | Chromium | 0.46 | J | | MS | 1,10 | |
| | 7440-48-4 | Cobalt | 0.12 | J | * | MS | 10,550 | |
| | 7440-50-8 | Copper | 63.1 | | *NE | MS | J+ 7 | |
| | 7439-89-6 | Iron | | | | | 1 . | |
| | 7439-92-1 | Lead | 1050 | | D* | MS | 1 5 ~ | |
| | 7439-95-4 | Magnesium | | | | | 1 | |
| | 7439-96-5 | Manganese | 135. | | | MS | 1 | |
| | 7439-97-6 | Mercury | | | | | Ï | |
| | 7440-02-0 | Nickel | 0.14 | J | E | MS | 0.550. | |
| | 7440-09-7 | Potassium | | | | | 10 | |
| | 7782-49-2 | Selenium | 0.90 | J | | MS | 12.80 | |
| | 7440-22-4 | Silver | 6.9 | | И | MS | Th | |
| | 7440-23-5 | Sodium | | | | | 1 7 | |
| | 7440-28-0 | Thallium | 0.43 | J | | MS | T- 2 | |
| | 7440-62-2 | Vanadium | 4.9 | | | MS | 1 - F | |
| | 7440-66-6 | Zinc | 140. | | *E | MS | 7 7 2/ | |
| | 57-12-5 | Cyanide | | | | | 1 7 1 | |
| | 3. <u>22</u> 3 | | | | | | 1 241 | |
| | | | | | | | 1 | |
| ı | | <u></u> | | <u> </u> | | | J | |
| olor Be | fore: GREEN | Clarit | y Before: | | _ Texture: I | MEDIUM | · · | |
| | | | | | | | | |
| olor Aft | ter: GREEN | Clarit | y After: CLOUD | (| Artifacts | · | | |
| 'ammant- | | | | | | | | |
| comments | | | | | | | | |
| E: The | reported v | alue is estim | ated due to the | prese | ence of inte | rieren | ice. | |
| | | | | | | | | |

| | EPA | SAMPLE | NO. |
|---|-----|--------|-----|
| Γ | | мн35К6 | |

| | | . ~ | Gt | CDF400000 | | | | |
|--------------------|--------------|----------------|-----------------|--------------------------------|-------------|------------------|--|--|
| Lab Name | : ALS Labora | tory Group | Contract: | EPWU9U36 | | | | |
| Lab Code | : DATAC C | ase No.: 40755 | Mod. Ref. | Mod. Ref. No.: SDG No.: MH35H7 | | | | |
| Matrix: | Soil | | Lab Sample | ID: 10307 | 70014 | | | |
| solids | : 91.4 | | Date Recei | ved: <u>11/03</u> | /2010 | ····· | | |
| Concentr | ation Units | (ug/L, ug or m | ng/kg dry weigh | ıt): mg/kg | | | | |
| | CAS No. | T T | Concentration | С | Q I | м | | |
| | 7429-90-5 | Aluminum | 3270 | | | P | | |
| | 7440-36-0 | Antimony | 3270 | | | - | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | ···· | | | \neg | | |
| | 7440-70-2 | Calcium | 246. | J | | 5470 m | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 46300 | | D | P | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 1920 | | | Ρ | | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | |
| | 7440-09-7 | Potassium | 769. | | | T+ 7 | | |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 70.9 | J | E | <u>₽</u> 547 U丁 | | |
| | 7440-28-0 | Thallium | | | | | | |
| | 7440-62-2 | Vanadium | ··· | | | 547 UJ 2/18/1 | | |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | _ | | |
| | | | | | | | | |
| Color Be | fore: BROWN | Clarity | Before: | , Te | xture: MEDI | UM | | |
| | ter: YELLOW | | After: CLEAR | | | | | |
| JOIOL AI | rear. Induow | Crarrey | THE COL. | | | | | |
| Comments E: The | | alue is estima | ted due to the | presence | of interfer | cence. | | |
| | | | | | | | | |
| | | | | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | - | |

| | | | | | | MH35F | K6 |
|----------|--------------|-----------------------|------------------|---------------|--------------|---------------|-------------------------|
| Lab Name | : ALS Labora | tory Group | Contract: | EPW090: | 36 | | |
| Lab Code | : DATAC C | ase No.: <u>407</u> 5 | Mod. Ref. | No.: | SDG | No.: <u>M</u> | ш35н7 |
| Matrix: | Soil | <u>-</u> | Lab Sample | ID: <u>1</u> | 030770014 | | ····· |
| % Solids | : 91.4 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| | | | <i>.</i> | | /1 | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | it): mg, | / kg | | 1 |
| | CAS No. | Analyte | Concentration | C | Q | M | |
| | 7429-90-5 | Aluminum | | | | | - m |
| | 7440-36-0 | Antimony | 3.6 | | N | MS | J+ N J+ N 0.55 UJ |
| | 7440-38-2 | Arsenic | 37.7 | | NE | MS | J+ 2 |
| | 7440-39-3 | Barium | 68.4 | | N | MS | J+ /*. |
| | 7440-41-7 | Beryllium | 0.19 | Ĵ | E | MS | 0.56 01 |
| | 7440-43-9 | Cadmium | 9.0 | | Е | MS | J |
| | 7440-70-2 | Calcium | | | | | 7 |
| | 7440-47-3 | Chromium | 2.7 | | | MS | KA |
| | 7440-48-4 | Cobalt | 1.5 | | * | MS | J 3/10 |
| | 7440-50-8 | Copper | 285. | | *NE | MS | J+ 7 |
| • | 7439-89-6 | Iron | | | | | _ |
| | 7439-92-1 | Lead | 3170 | | D* | MS | J |
| | 7439-95-4 | Magnesium | | | | | |
| | 7439-96-5 | Manganese | 433. | | | MS | - |
| | 7439-97-6 | Mercury | | | | | _ |
| | 7440-02-0 | Nickel | 1.4 | | E | MS | J 7 |
| | 7440-09-7 | Potassium | | | | | · |
| | 7782-49-2 | Selenium | 1.3 | J | | MS | 2.70.4 |
| | 7440-22-4 | Silver | 22.9 | | N | MS | J Karalia III |
| | 7440-23-5 | Sodium | | | | | _ |
| | 7440-28-0 | Thallium | 0.37 | J | | MS | J- 7 21 |
| | 7440-62-2 | Vanadium | 15.4 | | | MS | 3110 |
| | 7440-66-6 | Zinc | 2580 | | D*E | MS | 7 1 |
| | 57-12-5 | Cyanide | | | | | 2/18/u |
| | | | | | | | 1 |
| | | | | <u> </u> | | | |
| Color Be | fore: BROWN | Clarit | ty Before: | | Texture: M | EDIUM | |
| Color Af | ter: BROWN | Clarit | ty After: CLOUD | <u> </u> | _ Artifacts: | | |
| Comments | | | | | | £ | |
| E: The | reported v | alue is estim | nated due to the | preser | ice of inter | reren | ce. |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| MH35K7 | |
|--------|--|
| | |

| Tab Namo | · MIG Ishor | atory Group | Contract: | ᄄᄧᇑᄼᅆᄼ | L_ 136 | | | Į. |
|--------------------|-------------|----------------|-----------------|---------|--------------|------------|----------|--------|
| | | | | | | IDC No. M | 13517 | |
| Lab Code | : DATAC | Case No.: 4075 | Mod. Ref. | мо.: _ | | DG NO.: M | н 35 н / | |
| Matrix: | Soil | | Lab Sample | ID: 1 | L03077001 | 5 | | |
| % Solids | : 83.7 | | Date Recei | ved: 1 | L1/03/201 | 0 | | |
| Concentr | ation Units | ug/L, ug or | mg/kg dry weigh | nt): mg | J∕kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429905 | Aluminum | 19500 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 1540 | | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 55900 | | D | Р | | |
| | 7439-92-1 | Lead | | | | | | |
| ₩. | 7439-95-4 | Magnesium | 9940 | | | P | | _ |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | re |
| | 7440-09-7 | Potassium | 1090 | | | P | J+ | ,- |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | m/2, -7 | |
| | 7440-23-5 | Sodium | 59.2 | J | E | P | 59/ | 0,1 |
| | 7440-28-0 | Thallium | | | | | 597 | 2/18/1 |
| | 7440-62-2 | Vanadium | | | | | | 7 |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | - | | | | |
| | | | | | | | | |
| Color Be | fore: BROWN | Clarit | y Before: | | _ Texture | e: MEDIUM | | |
| Color Af | ter: YELLOW | Clarit | y After: CLEAR | | _ Artifad | cts: | | |
| G | | | | | | | | |
| Comments E: The | | value is estim | ated due to the | prese | nce of in | nterferenc | e. | |
| | | | | | | | | |
| | | | | | . | | | |
| | | | <u> </u> | | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35K7 | |

| | | Case No.: <u>407</u> 5 | | | SDG | 110 1 | MIJJIII | |
|----------|-------------|------------------------|-----------------|--------|------------|----------|---------|----------------|
| atrix: | Soil | | Lab Sample | : ID: | 1030770015 | | | |
| Solids | : 83.7 | | Date Recei | .ved: | 11/03/2010 | .,,, | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): n | ng/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | <u> </u> | | |
| | 7440-36-0 | Antimony | 0.41 | J | N | MS | 1.2 | U |
| | 7440-38-2 | Arsenic | 31.9 | | NE | MS | 1 24 | - 7 |
| | 7440-39-3 | Barium | 154. | | N | MS | 1.2 | t 7 |
| | 7440-41-7 | Beryllium | 0.79 | | E | MS | T+ | - 11 |
| | 7440-43-9 | Cadmium | 3.7 | | E | MS | 1 🔭 | n |
| | 7440-70-2 | Calcium | | | | | 1 7 | |
| | 7440-47-3 | Chromium | 9.9 | | | MS | | |
| | 7440-48-4 | Cobalt | 21.4 | | * | MS |] | |
| | 7440-50-8 | Copper | 162. | | *NE | MS |]]+ | Ħ |
| | 7439-89-6 | Iron | | | | |] | 7 |
| | 7439-92-1 | Lead | 1070 | | D* | MS | I | " |
| | 7439-95-4 | Magnesium | | | | | 1 | |
| | 7439-96-5 | Manganese | 5570 | | D | MS | | - |
| | 7439-97-6 | Mercury | | | | | 1 | 7 |
| | 7440-02-0 | Nickel | 9.5 | | E | MS | 1 1 | " |
| | 7440-09-7 | Potassium | | | | | 1 | |
| | 7782-49-2 | Selenium | 0.52 | J | | MS | 3.0 | U |
| | 7440-22-4 | Silver | 2.7 | | N | MS |]] | 7 |
| | 7440-23-5 | Sodium | | | | | • | |
| | 7440-28-0 | Thallium | 0.56 | J | | MS | | ~ |
| [| 7440-62-2 | Vanadium | 47.5 | | | MS | J | 15 |
| | 7440-66-6 | Zinc | 498. | | *E | MS |]] | -# a 2/1 |
| | 57-12-5 | Cyanide | | | | |] | 2/1 |
| L | | | | | | | | |
| olor Bei | fore: BROWN | Clarit | y Before: | | Texture: M | EDIUM | 1 | |
| | | | y After: CLOUDY | | Artifacts: | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH35K8 | |

| | | | | | | MH35K | |
|----------|--------------|--|-----------------|------------------|-----------|---------------------------------------|----------------|
| ab Name | : ALS Labora | tory Group | Contract: l | EPW09036 | | | |
| ab Code | : DATAC C | Case No.: 4075 | 5 Mod. Ref. | No.: | SDG 1 | No.: <u>M</u> | Н35Н7 |
| atrix: | Soil | | Lab Sample | ID: 1030 | 770016 | | |
| Solids | : 75.3 | | Date Recei | ved: <u>11/0</u> | 3/2010 | | |
| | | | | | | | |
| ncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): mg/kg | | · · · · · · · · · · · · · · · · · · · | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 13600 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1310 | | | P | |
| | 7440-47-3 | Chromium | 2020 | | | 1 | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 37200 | | | Р | |
| | 7439-89-6 | Lead | 37200 | | | | |
| | 7439-92-1 | | 7200 | | | P | |
| | | Magnesium | 7200 | | | | |
| | 7439-96-5 | Manganese | | | | - | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | 664 U 664 U |
| | 7440-09-7 | Potassium | 645. | | | P | 667 0 |
| | 7782-49-2 | Selenium | | | | - | |
| | 7440-22-4 | Silver | | | | | |
| | 7440-23-5 | Sodium | 22.1 | J | E | P | 664 U. |
| | 7440-28-0 | Thallium | | | | | 9 |
| | 7440-62-2 | Vanadium | | | | | 7 |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | ., | |
| | | | | | | <u> </u> | |
| | | <u> </u> | *** | | | | |
| olor Be | fore: BROWN | Clarit | y Before: | ТТ | exture: M | EDIUM | |
| olor Af | ter: YELLOW | Clarit | y After: CLEAR | A | rtifacts: | ** | |
| | | | | | | | |
| comments | | _ | | | | _ | |
| E: The | reported v | alue is estim | ated due to the | presence | of inter | reren | ce. |
| | | | | | | | |

EPA SAMPLE NO.
MH35K8

| Lab Name | : ALS Labora | tory Group | Contract: | EPW09 | 9036 | | |
|----------|--------------|----------------------|---|--------|----------------|---------------|--------------|
| Lab Code | : DATAC C | ase No.: <u>4075</u> | Mod. Ref. | No.: | SDG N | lo.: <u>P</u> | 4H35H7 |
| Matrix: | Soil | | Lab Sample | ID: | 1030770016 | | |
| % Solids | : 75.3 | | Date Recei | ved: | 11/03/2010 | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): n | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | 1,30 TH TTTT |
| | 7429-90-5 | Aluminum | | | - | | 711 |
| | 7440-36-0 | Antimony | 0.59 | J | N | MS | 1,30 |
| | 7440-38-2 | Arsenic | 25.8 | | NE | MS | J+ ** |
| | 7440-39-3 | Barium | 74.3 | | N | MS | J+ 2 |
| | 7440-41-7 | Beryllium | 1.3 | | E | MS | J+ 7 |
| | 7440-43-9 | Cadmium | 6.0 | | E | MS | 7 7 |
| | 7440-70-2 | Calcium | | | | | 1 7 |
| | 7440-47-3 | Chromium | 7.1 | | | MS | 1 |
| | 7440-48-4 | Cobalt | 12.3 | | * | MS | 31 |
| | 7440-50-8 | Copper | 516. | | *NE | MS | T+ 7 |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 481. | | * | MS | J |
| | 7439-95-4 | Magnesium | , | | | | |
| ~ | 7439-96-5 | Manganese | 4710 | | D | MS | 1 |
| | 7439-97-6 | Mercury | | | | | 1 2 |
| | 7440-02-0 | Nickel | 10.3 | | E | MS | JA |
| : | 7440-09-7 | Potassium | | | | | |
| | 7782-49-2 | Selenium | 0.35 | Ĵ | | MS | 3.30 7 |
| | 7440-22-4 | Silver | 2.0 | | N | MS | T |
| | 7440-23-5 | Sodium | | | | - | 7 |
| | 7440-28-0 | Thallium | 0.41 | J | | MS | 5- 7 |
| | 7440-62-2 | Vanadium | 32.5 | | | MS | I |
| | 7440-66-6 | Zinc | 651. | | D*E | MS | TA |
| | 57-12-5 | Cyanide | | | | | J 2/18/10 |
| | | | | | | | 2710/11 |
| | | | | | | |] |
| Color Be | fore: BROWN | Clarit | y Before: | | Texture: ME | DIUM | |
| Color Af | er: TAN | Clarit | y After: <u>CLEAR</u> | | Artifacts: | | |
| Comments | • | | | | | | |
| | | alue is octim | ated due to the | nroc | once of intert | foron | G0 |
| E. IHE | reborced As | arue is estilli | area due to the | bres | ence or interp | rereu | CE. |
| | | | | | | | |
| | | | | | | | |

| | | INORGAN | IC ANALYSIS DATA | SHEE | Т | EPA | SAMPI | LE NO. |
|----------|-------------------|----------------------|---|--------|---------------------------------------|--------|--------------|-------------|
| | | | | | | | MH35E | |
| | | | | | | | | |
| Lab Name | e: ALS Labora | tory Group | Contract: l | EPW09 | 036 | | | · · · |
| Lab Code | e: <u>DATAC</u> C | Case No.: <u>407</u> | Mod. Ref. | No.: | | SDG N | o.: <u>M</u> | н35н7 |
| Matrix: | Soil | <u>.</u> | Lab Sample | ID: | 10307700 | 17 | | |
| % Solids | s: 14.8 | | Date Recei | ved: | 11/03/20 | 10 | | |
| | | | | | | | | |
| Concent | ration Units | (ug/L, ug or | mg/kg dry weigh | it): m | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | | М | |
| | 7429-90-5 | Aluminum | 6720 | | | | P | |
| | 7440-36-0 | Antimony | | | - | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 2040 | J | | | P | 3380 U |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | *************************************** | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 141000 | | | | P | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 2120 | J | | | P | 3380 U |
| - · · | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | · | | |
| | 7440-02-0 | Nickel | | | | | | |
| | 7440-09-7 | Potassium | 1130 | J | | | P | 3380 U |
| | 7782-49-2 | Selenium | | | | | | 3380 U 3 |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 139. | J | E | | P | 3380 UJ |
| | 7440-28-0 | Thallium | | | _ _ | | | , |
| | 7440-62-2 | Vanadium | | | | | | , |
| | 7440-66-6 | Zinc . | | | · · · · · · · · · · · · · · · · · · · | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | 0. 12.0 | 0,100,200 | | | | | | • |
| | | | | | | | | |
| | | | | ii | | | | |
| Color Be | efore: BROWN | Clari | ty Before: | | Textu | re: ME | DIUM | |
| | | | ty After: CLEAR | | | | | |
| | <u></u> | | | | | | | |
| Comments | z • | | | | | | | |

E: The reported value is estimated due to the presence of interference.

EPA SAMPLE NO.
MH35K9

| h Cada | DATAC C | Case No.: 407 | 55 Mod Ref | No • | SDG | No. : N | (H35H7 |
|--------|--------------|----------------|------------------|-------|-------------------|---------|-------------------------------|
| D COde | e. DATAC | ase No 407 | | | | | |
| trix: | Soil | | Lab Sample | ID: | 1030770017 | | |
| Solida | s: 14.8 | | Date Recei | ved: | 11/03/2010 | | - |
| DOTIG | 21.0 | | 2000 11000 | | | | |
| ncenti | ration Units | (11a/Ir 11a or | mg/kg dry weigh | t): m | ıa/ka | | |
| | | T | 1 | | I | T | 1 |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 5.2 | J | Ŋ | MS | 6.8 |
| | 7440-38-2 | Arsenic | 42.6 | | NE | MS | 5+ |
| | 7440-39-3 | Barium | 119. | | N | MS |]]+ |
| | 7440-41-7 | Beryllium | 0.84 | J | E | MS | 3.4 |
| | 7440-43-9 | Cadmium | 1.7 | J | Ē | MS | 6.8 55 54 3.4 3.4 |
| | 7440-70-2 | Calcium | | | | |] |
| | 7440-47-3 | Chromium | 19.7 | | | MS |] _ |
| | 7440-48-4 | Cobalt | 4.8 | | * | MS | 1 7 |
| | 7440-50-8 | Copper | 303. | | *NE | MS | F |
| | 7439-89-6 | Iron | | | | | |
| | 7439-92-1 | Lead | 668. | | * | MS | J |
| | 7439-95-4 | Magnesium | | | | | 1 |
| - | 7439-96-5 | Manganese | 1180 | | | MS |] |
| | 7439-97-6 | Mercury | | | | | Ī _ |
| | 7440-02-0 | Nickel | 5.9 | | E | MS | 1 5 |
| | 7440-09-7 | Potassium | | | | | Ì |
| | 7782-49-2 | Selenium | 2.0 | Ĵ | | MS | 17 |
| | 7440-22-4 | Silver | 27.1 | | N | MS | 1 + |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.31 | J | | MS | 1 1- |
| | 7440-62-2 | Vanadium | 20.8 | | | MS | I |
| | 7440-66-6 | Zinc | 350. | - | *E | MS | 1- |
| | 57-12-5 | Cyanide | | | | | 1 |
| | | | | | | | 1 |
| | | | 1 | | | | 1 |
| _ | | | | | | | - |
| lor Be | efore: BROWN | Clari | ty Before: | | Texture: <u>F</u> | TNE | |
| lor Af | ter: YELLOW | Clari | ty After: CLEAR | | Artifacts: | | |
| ~~~- | | | | | | | |
| mments | | | mated due to the | | <i>c</i> . | - | |

EPA SAMPLE NO.

| | | | | | L | MH35: | шU |
|---------|----------------|----------------|-----------------|--------|-----------|------------|--------|
| ab Name | a: ALS Labora | atory Group | Contract: | EPW090 | 36 | | |
| ab Code | DATAC 0 | Case No.: 4075 | Mod. Ref. | No.: | | SDG No.: M | IH35H7 |
| atrix: | Soil | | Lab Sample | ID: 1 | 10307700 | 18 | |
| Solids | s: <u>69.6</u> | | Date Recei | wed: 1 | L1/03/201 | 10 | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): mç | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 3020 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 223. | J | | Р | 7180 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 5150 | | | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 1090 | | | P | ., |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | 0.1 |
| | 7440-09-7 | Potassium | 307. | J | | P | 7180 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | 718 U |
| | 7440-23-5 | Sodium | 23.0 | J | E | P | "/18 U |
| | 7440-28-0 | Thallium | | | | | |
| | 7440-62-2 | Vanadium | | | | | |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | | |
| | L | 1 | | | | | |
| lor Be | fore: BROWN | Clarit | y Before: | | _ Textur | e: MEDIUM | |
| lor Af | ter: YELLOW | Clarit | y After: CLEAR | | _ Artifa | ıcts: | |
| mments | • | | | | | | |
| | | value is estim | ated due to the | prese | ence of i | .nterferen | ce. |
| | ~ | | | | | | |

Lab Name: ALS Laboratory Group Contract: EPW09036

7440-09-7

7782-49-2

7440-22-4

7440-23-5

7440-28-0

7440-62-2

7440-66-6

57-12-5

Potassium

Selenium

Silver

Sodium

Zinc.

Thallium

Vanadium

Cyanide

EPA SAMPLE NO.

MH35L0

| Lab Code | DATAC (| Tase No · 4075 | 55 Mod. Ref. | No • | SDC 1 | No - N | 143547 |
|----------|----------------|----------------|-----------------|--------------|------------|--------|----------|
| DOO CARL | brine (| 2013 | Mod. Rel. | NO | | | 1133117 |
| Matrix: | Soil | | Lab Sample | ID: <u>1</u> | .030770018 | | |
| % Solids | s: <u>69.6</u> | | Date Recei | ved: 1 | 1/03/2010 | | |
| Concenti | cation Units | (ug/L, ug or | mg/kg dry weigh | .t): mg | :/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 1.7 | | N | MS | 5 22 |
| | 7440-38-2 | Arsenic | 45.6 | | NE | MS | 5+2 |
| | 7440-39-3 | Barium | 264. | | N | MS | J+ 7 |
| | 7440-41-7 | Beryllium | 1.3 | | E | MS | J+ 71 |
| | 7440-43-9 | Cadmium | 6.0 | | E | MS | 5 K |
| | 7440-70-2 | Calcium | | | | | |
| | 7440-47-3 | Chromium | 6.2 | | | MS | 14A |
| | 7440-48-4 | Cobalt | 15.3 | | * | MS | J 3/10/1 |
| | 7440-50-8 | Copper | 424. | | *NE | MS | T+ 7 |
| | 7439-89-6 | Iron | | | | | 3 # |
| | 7439-92-1 | Lead | 2030 | | D* | MS | J |
| | 7439-95-4 | Magnesium | | | | | |
| | 7439-96-5 | Manganese | 7960 | | D | MS | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 7.7 | | E | MS | J " |

| olor Before: BROWN | _ Clarity Before: | Texture: MEDIUM . |
|--------------------|-----------------------|-------------------------------|
| olor After: TAN | _ Clarity After: CLI | EAR Artifacts: |
| omments: | | |
| m . mi | ie actimated due to t | the presence of interference. |

0.66

11.8

0.77

27.8

614.

J

MS

MS

MS

MS

MS

*E

2/18/11

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MH35L1

| Lab Cod | e: DATAC | Case No.: <u>407</u> | 55 Mod. Ref. | No.: | SDG | No.: M | ін35н7 |
|---------|----------------|----------------------|------------------|---------------|-----------|--------|--|
| Matrix: | Soil | | Lab Sample | ID: 10 | 30770019 | | |
| & Solid | s: <u>58.5</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| Concent | ration Units | ug/L, ug o | mg/kg dry weigh | nt): mg/ | ′kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 11500 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1280 | | | P | |
| | 7440-47-3 | Chromium | | | | _ | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | ,,,,, | | | | |
| | 7439-89-6 | Iron | 27100 | | | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 5670 | | | P | |
| | 7439-96-5 | Manganese | | ļ | | | |
| | 7439-97-6 | Mercury | | | | | Į |
| | 7440-02-0 | Nickel | | | | | TI M |
| | 7440-09-7 | Potassium | 1210 | | | P | J 7 |
| | 7782-49-2 | Selenium | | ļ | | | |
| | 7440-22-4 | Silver | | | | | 22-022 |
| | 7440-23-5 | Sodium | 44.3 | J | E | P | 00 000 |
| | 7440-28-0 | Thallium | | | | | J+ 22 88 855 2/1 |
| | 7440-62-2 | Vanadium | | | | _ | (' |
| | 7440-66-6 | Zinc | | | | | 1 |
| | 57-12-5 | Cyanide | | | , | | |
| | | | | _ | · | | |
| | | | | | | | J |
| Color B | efore: BROWN | Clari | ty Before: | | Texture: | MEDIUM | <u>. </u> |
| Color A | fter: YELLOW | Clari | ty After: CLEAR | | Artifact | s: | |
| | | | | | | | |
| Comment | | | mated due to the | | | C | |

EPA SAMPLE NO.

| b Code: Etrix: Solids: | DATAC Ca Soil 58.5 ion Units CAS No. 429-90-5 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | ase No.: <u>4075</u> | Lab Sample Date Recei mg/kg dry weigh Concentration 0.71 49.4 | No.: | SDG 030770019 1/03/2010 | No.: M | |
|--|--|---|---|---------------|------------------------------------|---------|-----------|
| trix: Solids: 5 ncentrat: 74 74 74 74 74 | Soil 58.5 ion Units CAS No. 429-90-5 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | (ug/L, ug or Analyte Aluminum Antimony Arsenic Barium | Lab Sample Date Recei mg/kg dry weigh Concentration 0.71 49.4 | ID: 10 ved: 1 | 030770019 1/03/2010 /kg Q | М | |
| Solids: 5 ncentrat: 74 74 74 74 74 | ion Units CAS No. 429-90-5 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | Analyte Aluminum Antimony Arsenic Barium | Date Receimg/kg dry weigh Concentration 0.71 49.4 | ved: 1: | 1/03/2010 /kg Q | | |
| ncentrat: 74 74 74 74 | ion Units CAS No. 429-90-5 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | Analyte Aluminum Antimony Arsenic Barium | mg/kg dry weigh Concentration 0.71 49.4 | t): mg/ | /kg Q | | |
| 74 74 74 74 | CAS No. 429-90-5 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | Analyte Aluminum Antimony Arsenic Barium | Concentration 0.71 49.4 | С | Q | | |
| 74 74 74 74 | CAS No. 429-90-5 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | Analyte Aluminum Antimony Arsenic Barium | Concentration 0.71 49.4 | С | Q | | |
| 74 74 74 74 | 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | Antimony Arsenic Barium | 49.4 | J | N | MC | |
| 74 74 74 74 | 440-36-0 440-38-2 440-39-3 440-41-7 440-43-9 | Arsenic Barium | 49.4 | J | N | MC | |
| 74 74 | 440-39-3 440-41-7 440-43-9 | Barium | | | -1 | CM. | 1.70 77 |
| 74 | 440-41-7 440-43-9 | | | | NE | MS | T+ 3 |
| | 440-43-9 | Bernillium | 205. | | N | MS | 3 + 2 |
| 74 | | ner Arrron | 1.3 | | E | MS | 17+ % |
| | | Cadmium | 7.0 | | E | MS | T 79 |
| 74 | 440-70-2 | Calcium | | | | | |
| 74 | 440-47-3 | Chromium | 8.2 | | | MS | I # 7 7 7 |
| 74 | 440-48-4 | Cobalt | 15.8 | | * | MS | In |
| 74 | 440-50-8 | Copper | 294. | | *NE | MS | J+ 12 |
| 74 | 439-89-6 | Iron | | | | | - 71 |
| 74 | 439-92-1 | Lead | 754. | | * | MS | 1 |
| 74 | 439-95-4 | Magnesium | | | | | |
| 74 | 439-96-5 | Manganese | 11500 | | D | MS | |
| 74 | 439-97-6 | Mercury | | | | | - H |
| 74 | 440-02-0 | Nickel | 7.8 | | E | MS | 1 |
| 74 | 440-09-7 | Potassium | | | | | |
| 77 | 782-49-2 | Selenium | 0.59 | J | | MS | 4.30 |
| 74 | 440-22-4 | Silver | 4.0 | | N | MS | J |
| 74 | 440-23-5 | Sodium | | | | | |
| 74 | 440-28-0 | Thallium | 0.88 | | | MS | |
| 74 | 440-62-2 | Vanadium | 38.0 | | | MS | I m |
| 74 | 440-66-6 | Zinc | 899. | | D*E | MS |]] ^ ` |
| 57 | 7-12-5 | Cyanide | | | | | J 2/18 |
| | | | | | | | • |
| | | | | | | , |] |
| lor, Befo: | re: BROWN | Clarit | cy Before: | | _ Texture: | MEDIUM | |
| lor Afte: | r: TAN | Clarit | y After: CLOUD | Υ | _ Artifacts | ;: | |
| | | | | | | | |
| mments: | | | | | | | |
| E: The r | reported va | alue is estim | nated due to the | preser | nce of inte | erferen | ce. |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET EPA SAMPLE NO.

MH35L2

| ix: lids: entrat 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 | Soil 83.4 | (ug/L, ug or Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper | Lab Sample Date Recei mg/kg dry weigh Concentration 15700 | ved: <u>1</u> | 1/03/2010 | M P | |
|---|--|--|---|--|-------------|---------------|----------|
| entrat | CAS No. 7429-90-5 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 | Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | mg/kg dry weigh Concentration 15700 | t): mg/ | /kg | P | |
| entrat | CAS No. 7429-90-5 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 | Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | Concentration 15700 | т т | | P | |
| 7 7 7 7 7 7 7 7 7 7 7 | CAS No. 7429-90-5 7440-36-0 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 | Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | Concentration 15700 | т т | | P | |
| 7 7 7 7 7 7 7 7 7 | 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 | Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | 15700 | C | Q | P | |
| 7 7 7 7 7 7 7 7 7 | 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 | Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | | | | | |
| 7 7 7 7 7 7 7 7 7 | 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 | Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | 1990 | | | P | |
| 7 7 7 7 7 7 7 7 | 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 | Barium Beryllium Cadmium Calcium Chromium Cobalt | 1990 | | | P | |
| 7 7 7 7 7 7 7 | 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 | Beryllium Cadmium Calcium Chromium Cobalt | 1990 | | | P | |
| 7 7 7 7 7 7 | 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 | Cadmium Calcium Chromium Cobalt | 1990 | | | P | |
| 7 7 7 7 7 7 | 7440-70-2 7440-47-3 7440-48-4 7440-50-8 | Calcium Chromium Cobalt | 1990 | | | P | |
| 7 7 7 7 7 | 7440-47-3 7440-48-4 7440-50-8 | Chromium Cobalt | 1990 | | | P | |
| 7 7 7 7 | 7440-48-4 7440-50-8 | Cobalt | | | | [[| |
| 7 7 7 7 | 7440-50-8 | | | | | | |
| 7 7 7 | | Copper | | | | | |
| 7 | 7439-89-6 | | | | | | |
| 7 | | Iron | 71200 | - | D | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 11500 | ļ | | P | |
| 7 | 7439-96-5 | Manganese | | <u> </u> | | | |
| - | 7439-97-6 | Mercury | | ļ <u>ļ.</u> | | | |
| | 7440-02-0 | Nickel | | | | P | J+ |
| | 7440-09-7 | Potassium | 642. | | | P | 7 |
| | 7782-49-2 | Selenium | | ļļ | | | |
| 7 | 7440-22-4 | Silver | | | | P | 100 |
| | 7440-23-5 | Sodium | 16.7 | J | E | P | 600 |
| | 7440-28-0 | Thallium | | <u> </u> | | | |
| 7 | 7440-62-2 | Vanadium | | | | | |
| 7 | 7440-66-6 | Zinc | | | | | |
| 5 | 57-12-5 | Cyanide | | | | _ | |
| | | | | - | | | |
| | | | <u> </u> | | | | l |
| or Refo | ore: BROWN | Clari | ty Before: | | Texture: | MEDIUM | |
| | | | | | | | <u> </u> |
| or Afte | er: YELLOW | Clari | ty After: <u>CLEAR</u> | | _ Artifacts | s: <u>_</u> _ | |
| | | · | | | | | |
| ments: | | | | | | fa | ~ |
| : The | reported v | ralue is estir | mated due to the | prese | nce of inte | erreren | ce. |

EPA SAMPLE NO.

| | |
|--------|--|
| MH35L2 | |

| ab Code | e: DATAC C | Case No.: 4075 | 5 Mod. Ref. | No.: _ | SDG 1 | No.: <u>M</u> | H35H7 |
|----------|----------------|----------------|-----------------------|---------------|-------------|---------------|--|
| atrix: | Soil | · | Lab Sample | ID: <u>1</u> | 030770020 | | |
| Solids | s: <u>83.4</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| oncentr | ation Units | ·(ug/L, ug or | mg/kg dry weigh | t): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 7 |
| | 7440-36-0 | Antimony | 0.34 | J | N | MS | 1.20 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |
| | 7440-38-2 | Arsenic | 31.5 | | NE | MS | J+ A |
| | 7440-39-3 | Barium | 94.2 | | N | MS | 1+ 7 |
| | 7440-41-7 | Beryllium | 1.4 | | E | MS | サナナ なるか |
| | 7440-43-9 | Cadmium | 10.4 | | E | MS |]] " |
| | 7440-70-2 | Calcium | | | · | | |
| | 7440-47-3 | Chromium | 8.0 | | | MS | J+ W |
| | 7440-48-4 | Cobalt | 20.5 | | * | MS | -4-7 |
| | 7440-50-8 | Copper | 1240 | | D*NE | MS | J+ M |
| | 7439-89-6 | Iron | | | | | - 71 |
| | 7439-92-1 | Lead | 1480 | | D* | MS | 1 7 " |
| | 7439-95-4 | Magnesium | | | , | _ | |
| • | 7439-96-5 | Manganese | 6600 | | D | MS | 1 |
| | 7439-97-6 | Mercury | | | | | 工 弘 |
| | 7440-02-0 | Nickel | 11.7 | | E | MS | 1 7 |
| | 7440-09-7 | Potassium | | | | | 2000 |
| | 7782-49-2 | Selenium | 0.59 | J | | MS | 3,00 |
| | 7440-22-4 | Silver | 1.2 | | N | MS | J |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.44 | J | | MS | J- 7 |
| | 7440-62-2 | Vanadium | 40.9 | | | MS | J |
| | 7440-66-6 | Zinc | 1500 | | D*E | MS | J 19 |
| | 57-12-5 | Cyanide | | | | | 2/1 |
| | | | | | | | 1 2/1 |
| | | | | | | | _ |
| olor Be | efore: BROWN | Clarit | y Before: | | Texture: (| COARSE | |
| | <u> </u> | | | | | · · | • |
| color At | fter: BROWN | Clarit | y After: <u>CLEAR</u> | | _ Artifacts | · | |
| | | | | | | | |
| Comments | | | ated due to the | | . 6 | | |

EPA SAMPLE NO.

| ab Code: Matrix: Solids: Concentrat | DATAC Ca | (ug/L, ug or Analyte | Contract: E 5 Mod. Ref. I Lab Sample Date Recei mg/kg dry weigh Concentration 986. | No.: ID: <u>10</u> ved: <u>11</u> | SDG 30770021 /03/2010 kg | | н35н7 |
|-------------------------------------|---|-------------------------------|--|---|-----------------------------------|---|-------------|
| atrix: Solids: oncentrat | Soil 16.8 tion Units CAS No. 7429-90-5 7440-36-0 | (ug/L, ug or Analyte Aluminum | Lab Sample Date Receimg/kg dry weigh Concentration | ID: 10 ved: 11 t): mg/ | 30770021 /03/2010 kg | | H35H7 |
| Solids: | 16.8 tion Units CAS No. 7429-90-5 7440-36-0 | Analyte Aluminum | Date Receimg/kg dry weigh | ved: <u>11</u> | /03/2010 kg | | |
| oncentrat | tion Units CAS No. 7429-90-5 7440-36-0 | Analyte Aluminum | mg/kg dry weigh | t): mg/ | kg | | <u> </u> |
| 7 | CAS No. 7429-90-5 7440-36-0 | Analyte Aluminum | Concentration | | | | |
| | 7429-90-5 7440-36-0 | Aluminum | | С | ^ | | |
| · | 7440-36-0 | | 986 | | Q | М | |
| 7 | | | 500. | | | P | İ |
| | 7440-38-2 | Antimony | | | | | |
| 7 | | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| 7 | 1440-41-7 | Beryllium | | | | | İ |
| 7 | 7440-43-9 | Cadmium | | | | | 000- |
| 7 | 7440-70-2 | Calcium | 279. | J | | P | 2980 1 |
| 7 | 7440-47-3 | Chromium | | | | | |
| 7 | 7440-48-4 | Cobalt | | | | | |
| 7 | 7440-50-8 | Copper | | | | <u> </u> | |
| 7 | 7439-89-6 | Iron | 273000 | | D | P | |
| 7 | 7439-92-1 | Lead | | | | | 2980 |
| 7 | 7439-95-4 | Magnesium | 486. | J | | P | 2780 |
| 7 | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| 7 | 7440-02-0 | Nickel | | | | | 2980 l |
| 7 | 7440-09-7 | Potassium | 773. | J | | P | 1 2780 6 |
| 7 | 7782-49-2 | Selenium | | | | | ļ |
| 7 | 7440-22-4 | Silver | | | | | 100801 |
| 7 | 7440-23-5 | Sodium | 48.1 | J | E | P | 27000 |
| 7 | 7440-28-0 | Thallium | | | | | 4 |
| [- 7 | 7440-62-2 | Vanadium | | <u> </u> | | | |
| 7 | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | 1 |
| | | | | | | | 1 |
| | | | | | | | |
| olor Bef | ore: BROWN | Clarit | y Before: | | Texture: 1 | MEDIUM | |
| olor Aft | er: YELLOW | Clarit | cy After: CLEAR | | Artifacts | : | |
| Comments: | | | | | | | |
| | reported v | alue is estin | nated due to the | prese | nce of inte | rferen | .ce. |
| | | <u> </u> | <u></u> . | | | | |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| | | | | | | 1 | 4H35L | 3 | |
|----------|---------------|---------------|------------------|---------------|----------|-------------|----------|-------------|-------------|
| Lab Name | : ALS Labora | tory Group | Contract: I | EPW090 | 36 | · | <u></u> | | |
| | | ase No.: 4075 | | | | SDG No | o.: MI | 135Н7 | _ |
| Matrix: | Soil | | Lab Sample | ID: <u>1</u> | .0307700 | 21 | | | |
| | | | Date Recei | wod: 1 | 1/03/20 | 1 በ | | | |
| % Solids | : 16.8 | | Date Recei | vea. <u>1</u> | .1/03/20 | | | | _ |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | /kg | | | | |
| | CAS No. | Analyte | Concentration | С | Q | | М | | |
| | 7429-90-5 | Aluminum | | | | | | | re |
| | 7440-36-0 | Antimony | 23.3 | | N | | MS | <u></u> | かりない |
| | 7440-38-2 | Arsenic | 969. | | NE | 1 | MS | 1 | <i>1</i> |
| | 7440-39-3 | Barium | 37.1 | | N | | MS | 7 4 | UT TH |
| | 7440-41-7 | Beryllium | 0.11 | J | E | | MS | 3.0 | 01 |
| | 7440-43-9 | Cadmium | 2.8 | J | E | | MS | 3. <i>0</i> | UJA |
| | 7440-70-2 | Calcium | | | ,, | | | | |
| | 7440-47-3 | Chromium | 11.3 | | | | MS | | · 1 |
| | 7440-48-4 | Cobalt | 1.4 | J | * | | MS | 3,0 |) ni |
| | 7440-50-8 | Copper | 235. | | *NE | | MS . | J+ | M |
| | 7439-89-6 | Iron | | | | | | | r |
| | 7439-92-1 | Lead | 1100 | | * | | MS | J | |
| | 7439-95-4 | Magnesium | | | | | | | |
| | 7439-96-5 | Manganese | 304. | | | | MS | | |
| | 7439-97-6 | Mercury | | | | | | | |
| | 7440-02-0 | Nickel | 1.6 | J | E | | MS | 3,0 | UJ |
| | 7440-09-7 | Potassium | | | | | | , | 11 4 |
| | 7782-49-2 | Selenium | 4.2 | J | | | MS | 15 | U si |
| | 7440-22-4 | Silver | 13.2 | | N | | MS | J | H |
| | 7440-23-5 | Sodium | | | | | | | W. |
| | 7440-28-0 | Thallium | 0.19 | J | | | MS | 7 | |
| | 7440-62-2 | Vanadium | 57.1 | | | | MS | 444 | - 1 3 kg |
| | 7440-66-6 | Zinc | 524. | | *E | | MS | J | 2/18/1 |
| | 57-12-5 | Cyanide | | | | | | | 2/18/1 |
| | | | | | | | | | |
| | | | | | | | <u> </u> | | |
| Color Be | efore: RED | Clari | ty Before: | | Textu | ıre: ME | EDIUM | | |
| | fter: BROWN | | ty After: CLEAR | | | | | | |
| | | | - | <u> </u> | | | | | |
| Comment | s. | valua ie asti | mated due to the | e prese | ence of | inter | feren | .ce. | |
| E: Tr | ie reboried , | AUTHE TO COLT | made da car | _ <u></u> | <u> </u> | | | | |

REGION VIII DATA VALIDATION REPORT INORGANIC

| Case/TDD No. | Site N | Name | Operable Unit |
|-----------------------|------------------|--------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Min | ing District | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | MH36L0 | |

| Review Assigned Date: _ | December 15, 2010 | Data Validator: | Fred Luck |
|--------------------------|-------------------|------------------|-------------|
| Review Completion Date:_ | February 18, 2011 | Report Reviewer: | Lesley Boyd |

| Sample ID | Matrix | Analysis |
|-----------|---------------|-------------|
| MH36L0 | Sediment | CLP –Metals |
| MH36L1 | | : |
| MH36L2 | | |
| MH36L3 | | |
| MH36L4 | | |
| MH36L5 | Mine Sediment | |
| MH36L6 | Sediment | |
| MH36L7 | | |
| MH36L8 | | - ' |
| MH36L9 | | |

DATA QUALITY STATEMENT

| () | Data are ACCEPTABLE according to EPA Function by the reviewer. | onal guideline | es with no qualifiers (flags) added |
|-----------------|--|----------------|---------------------------------------|
| () | Data are UNACCEPTABLE according to EPA Fun | ictional Guid | elines. |
| (X) | Data are acceptable with QUALIFICATIONS noted | d in review. | |
| Teleph | one/Communication Logs Enclosed? Yes | | NoX |
| CLP Prattention | roject Officer Attention Required? YesNon: | oX | _ If yes, list the items that require |

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, Case No. 40755, SDG No. MH36L0, consisted of ten sediment / mine sediment samples for metals by ICP-AES and ICP-MS (ISM01.2). The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|---|-----------|------------|-------------------------------|-------------------|
| MH36L0, MH36L1, MH36L2, MH36L3, MH36L4, MH36L5, MH36L7, MH36L8, MH36L9 | Antimony | U | Blank Contamination | 3 |
| MH36L9 | Barium | | | |
| MH36L0, MH36L2, MH36L4, MH36L5, MH36L6, MH36L7, MH36L8, MH36L9 | Beryllium | | | |
| MH36L0, MH36L5, MH36L8, MH36L9 | Cadmium | | | , |
| MH36L2, MH36L4, MH36L5, MH36L9 | Calcium | | | · |
| MH36L5, MH36L9 | Chromium | | | |
| MH36L5, MH36L9 | Cobalt | | | |
| MH36L5 | Nickel | | | |
| MH36L0, MH36L1, MH36L2, MH36L3, MH36L4, MH36L5, MH36L6, MH36L7, MH36L8, MH36L9 | Selenium | | · | |
| MH36L5, MH36L9 | Silver | | | |
| MH36L1, MH36L3 | Beryllium | J+ | Potentially false positive | 4 |
| All Samples | Potassium |] | detection in ICS check sample | |
| MH36L0, MH36L1, MH36L2, MH36L3, MH36L4, MH36L6, MH36L7, MH36L8 | Silver | | | |
| All Samples | Sodium | | | |
| | Thallium | | | |

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|-------------|--|------------|--|-------------------|
| All Samples | Selenium, Thallium | J- /UJ | MS 30 - 74%R, Post Digestion Spike %R < 75% | 7 |
| | Antimony, Silver | J/UJ | MS <30%R, Post Digestion Spike %R ≥ 75% | |
| | Arsenic, Lead, Potassium, Sodium, Zinc | J | Serial Dilution %D > 10% | 8 |



1. PRESERVATION AND HOLDING TIMES

| Al: | l technical | holding | times and | i preservation | criteria | were met. |
|-----|-------------|---------|-----------|----------------|----------|-----------|
|-----|-------------|---------|-----------|----------------|----------|-----------|

Yes____ No_X

Comments:

The samples were analyzed within 180 days for the ICP metals. According to the Sample Log-In Sheet and case narrative, the two sample coolers were each received at a temperature of 7° C, which is outside the recommended temperature range of $4 \pm 2^{\circ}$ C. The Sample Log-In Sheet further indicates that neither cooler contained a Cooler Temperature Indicator Bottle, as indicated on the form to be required. There is also no indication that SMO was contacted regarding this issue, neither is any documentation of the resolution or indication of how the cooler temperature was derived provided. The TR/COC also did not designate a sample for laboratory QC, but the documentation of the resolution of this issue is provided in the SDG.

When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters.

The field sampler had used CLP IDs in the incorrect format using the letter 'I' in accordance with the reported previous directions from Region 8, the SMO coordinator assigned new sample IDs to the affected samples and the laboratory was to note this issue in the SDG narrative, which is did. There is no apparent indication that the laboratory had any error involving sample confusion.

No other shipping or receiving problems were noted. Chain-of-custody, summary forms, and raw data were evaluated.

2. INSTRUMENT CALIBRATIONS: INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICV AND CCV)

The initial and continuing calibration verification standards (ICV and CCV, respectively) met SOW requirements.

Yes_X_ No___

Comments: None.

The calibration verification results were within 90-110% recovery for metals, 85-115% for cyanide, and 80-120% for mercury.

Yes_X_ No___

Comments: None.

Comments: The following table lists the blanks with contamination that resulted in sample qualification, elements present, affected samples, and data qualifiers:



Blank Contaminants

| Blank ID | Contam- inant | CRQL | MDL (mg/Kg) | Concentration Found in Blank (mg/Kg) | Associated Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-------------|------------------|------------------|----------------|--|-----------------------|--|--------------------------|
| PB | Antimony | 1 | 0.0097 | 0.030 | MH36L0 | 0.53 | 1.3 U |
| | , | | | | MH36L1 | 0.45 | 1.3 U |
| ľ | | | | | MH36L2 | 0.86 | 1.6 U |
| | | | | | MH36L3 | 0.45 | 1.4 U |
| | | | | | MH36L4 | 1.7 | 2.0 U |
| | | | | | MH36L5 | 0.31 | 3.2 U |
| | | | | | MH36L7 | 0.45 | 1.3 U |
| | | | | | MH36L8 | 0.19 | 1.3 U |
| | | | | | MH36L9 | 0.44 | 5.0 U |
| PB | Barium | 5 | 0.044 | 5.0 | MH36L9 | 21.4 | 24.9 U |
| PB | Beryllium | 0.5 | 0.0032 | 0.011 | MH36L0 | 0.38 | 0.63 U |
| | . , | | | | MH36L2 | 0.30 | 0.80 U |
| | | | İ | | MH36L4 | 0.34 | 1.0 U |
| | | | | · | MH36L5 | 0.79 | 1.6 U |
| | | | | | MH36L6 | 0.46 | 0.95 U |
| | | | | | MH36L7 | 0.45 | 0.65 U |
| | | | | · | MH36L8 | 0.53 | 0.63 U |
| | | | | | MH36L9 | 1.4 | 2.5 U |
| PB | Cadmium | 0.5 | 0.0027 | 0.50 | MH36L0 | 0.73 | 0.63 U |
| | | | | · | MH36L5 | 0.11 | 1.6 U |
| | | | | | MH36L8 | 0.42 | 0.63 U |
| | | | | | MH36L9 | 1.2 | 2.5 U |
| PB | Calcium | 500 | 1.7 | 2.587 | MH36L2 | 592 | 804 U |
| | | | | | MH36L4 | 851 | 1030 U |
| | | | | | MH36L5 | 1540 | 1580 U |
| | | | | | MH36L9 | 2310 | 2490 U |
| PB | Chromium | 1 | 0.026 | 1.00 | MH36L5 | 2.6 | 3.2 U |
| | | | | | MH36L9 | 2.8 | 5.0 U |
| PB | Cobalt | 1 | 0.0053 | 0.024 | MH36L5 | 1.5 | 1.6 U |
| | | | | | MH36L9 | 1.5 | 2.5 U |
| PB | Nickel | 0.5 | 0.013 | 0.500 | MH36L5 | 1.2 | 1.6 U |
| PB | Selenium | 2.5 | 0.036 | 2.500 | MH36L0 | 0.55 | 3.1 U |
| | | | | | MH36L1 | 0.32 | 3.3 U |
| | | | | | MH36L2 | 0.86 | 4.0 U |
| | | | Ĺ | | MH36L3 | 0.70 | 3.5 U |
| | | | | | MH36L4 | 1.2 | 5.1 U |
| | | | | | MH36L5 | 0.16 | 7.9 U |
| ' | | | | | MH36L6 | 1.4 | 4.8 U |
| | İ | | | | MH36L7 | 1.2 | 3.3 U |
| | | | | | MH36L8 | 0.61 | 3.1 U |
| | | | | | MH36L9 | 12.4 | 12.4 U |
| PB | Silver | 0.5 | 0.0023 | 0.006 | MH36L5 | 0.31 | 1.6 U |
| | | - · - | | 2.000 | MH36L9 | 0.71 | 2.5 U |



4. INDUCTIVELY COUPLED PLASMA - INTERFERENCE CHECK SAMPLE (ICP-ICS)

| | erence check sample (ICS) was run at the beginning and end of each sample and every 20 analytical samples, but <u>not</u> prior to the ICV. |
|--------------------------------|---|
| Yes_X_ | No |
| Comments: | None. |
| | bry of the analytes in the ICS solutions were within the range of 80-120% or the \pm the CRQL. |
| Yes NoX | |
| Comments: | exceeded the True Values by approximately 1.8 to 2.0 times the CRQL, this |
| | |
| Sample results interference wa | for aluminum, calcium, iron, and magnesium were less than the ICSA values or no as noted. |
| Yes_X_ | No NA |
| Comments: | None. |
| Sample results | contain potential false positives and false negatives. |
| Yes_X_ | No |
| Comments: negatives that a | The following table lists the elements with potential false positives or false resulted in sample qualification, affected samples, and data qualifiers: |
| | |

UOS

ICP Interferences

| Element | Concentration Found in ICSA Sample (ug/L) | Affected Samples | Concentration Found in Sample (mg/Kg) | Qualifier/ Adjustment |
|-----------|---|--|---|--------------------------|
| Beryllium | 0.39 | MH36L1 MH36L3 | >MDL | J+ |
| Potassium | 1020 | All samples | | |
| Silver | 0.027 | MH36L0 MH36L1 MH36L2 MH36L3 MH36L4 MH36L6 MH36L7 MH36L8 | | |
| Sodium | 975 | All samples | · | |
| Thallium | 0.049 | All samples | | |

5. LABORATORY CONTROL SAMPLE

None.

| _ | y control sample (LCS) was prepared and analyzed imilar matrix, or one per sample delivery group (wh | 3 3 |
|--------|--|-----|
| Yes_X_ | No | • |

All results were within control limits OF 70-130%.

Yes_X No___

Comments: None.

Comments:

6. FORM 6 & 12 - DUPLICATE SAMPLE ANALYSIS

Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent).

Yes_X_ No__ NA___

Comments: None.

Comments:

The following table lists the spike recoveries outside control limits, post

digestion spike recoveries, samples affected, and data qualifiers:

| | Matrix Spike %R | Post-Digestion %R | Samples Affected | Qualifiers |
|----------|--------------------|-------------------|------------------|------------|
| Antimony | 20% | 85% | All samples | J/UJ |
| Selenium | 55% | 67% | | J-/UJ |
| Silver | -11% | 86% | | J/UJ |
| Thallium | 74% | 69% | | J-/UJ |

A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Ag, Hg).

| Yes_ | X | No | NA |
|------|---|----|----|
| | - | | |

Comments: None.

8. ICP SERIAL DILUTION

A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent.

Comments: None.

The serial dilution was without interference problems as defined by the SOW.

Comments: The following serial dilution %Ds were greater than 10% and the original sample result was at least 50* the MDL:

| The state of the s | % Differe | | |
|--|------------|-------------|---|
| Arsenic Lead | 18% 34% | All samples | J |
| Potassium | 19% | | |
| Sodium Zinc | 27% 24% | | |



9. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

Yes___ No___ NA _X

Comments:

The SDG shows no indication of EPA Region 8 initiating any additional QA /

QC.

10. FORM 10 - INTERELEMENT CORRECTION FACTORS FOR ICP

Interelement corrections for ICP were reported.

Yes_X_

No

Comments:

None.

11. FORM 12 - PREPARATION LOG

Information on the preparation of samples for analysis was reported on Form 12.

Yes X

No

Comments:

None.

12. FORM 13 - ANALYSIS RUN LOG

A Form 13 with the required information was filled out for each analysis run in the data package.

Yes X

No

Comments:

None.

13. Additional Comments or Problems/Resolutions Not Addressed Above

Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
- J+ The associated numerical value is an estimated quantity but the result may be biased high.
- J- The associated numerical value is an estimated quantity but the result may be biased low.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.



ACRONYMS

AA Atomic Absorption

Ag Silver

CCB Continuing Calibration Blank

CCV Continuing Calibration Verification

CFR Code of Federal Regulations
CLP Contract Laboratory Program

CRA CRQL standard required for AA

CRQL Contract Required Quantitation Limit

CRI CRQL standard required for ICP

CV Cold Vapor

EPA U.S. Environmental Protection Agency
GFAA Graphite Furnace Atomic Absorption

Hg Mercury

ICB Initial Calibration Blank

ICP Inductively Coupled Plasma
ICS Interference Check Sample

ICSA Interference Check Sample (Solution A)

ICSAB Interference Check Sample (Solution AB)

ICV Initial Calibration Verification
LCS Laboratory Control Sample

LRA Linear Range Verification Analysis

MDL Method Detection Limit
PDS Post Digestion Spike

QC Quality Control

RPD Relative Percent Difference RPM Regional Project Manager

RSD Percent Relative Standard Deviation

SA Spike Added

SAS Special Analytical Services

SDG Sample Delivery Group

SOW Statement of Work

SR Sample Result

SSR Spiked Sample Result

| MH3 | ราเก |
|-----|------|

| | Soil | 4000-00-00-00-00-00-00-00-00-00-00-00-00 | Mod. Ref. Lab Sample | | | _ | | _ |
|---------|----------------|--|-----------------------|--------|-------------|--------|--|----|
| CLIA. | 0011 | | nao bampic | 10. 1 | 1030771001 | | | — |
| Solids | s: <u>79.4</u> | | Date Recei | ved: 1 | 11/03/2010 | | | — |
| oncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | it):mg | ı/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 8100 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | |] | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | |] | |
| | 7440-70-2 | Calcium | 1740 | | | P |] | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 38100 | | | P | [| |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 5830 | | | P | | |
| | 7439-96-5 | Manganese | | | | |] | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | • | | ــــــــــــــــــــــــــــــــــــــ | 7 |
| | 7440-09-7 | Potassium | 440. | J | E | P | - 7 | |
| | 7782-49-2 | Selenium | | | | | ļ | |
| | 7440-22-4 | Silver | | | | | J+ | 7 |
| | 7440-23-5 | Sodium | 30.8 | J | E | P | 1 7 | ·, |
| | 7440-28-0 | Thallium | | | | | | 21 |
| | 7440-62-2 | Vanadium | | | | | | ~/ |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| olor Be | fore: BROWN | Clarit | y Before: | | Texture: | COARSE | | |
| lor Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts | : | | |
| olor Af | | Clarit | y After: <u>CLEAR</u> | | _ Artifacts | : | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | мпзето | |

| | | | | | • | | | |
|-----------|---------------------|----------------|-----------------|--------|---|---------------|--------|-------------------|
| Lab Name | : ALS Labora | tory Group | Contract: | EPW09 | 036 | | | |
| Lab Code | : DATAC C | ase No.: 40755 | Mod. Ref. | No.: | SDG 1 | 10.: <u>M</u> | MH36L0 | _ |
| Matrix: | Soil | | Lab Sample | ID: | 1030771001 | | | |
| & Solide | : 79.4 | | Date Pecei | ued. | 11/03/2010 | | | |
| 0 001105 | • 10.4 | | Date Recei | veu. | 11/03/2010 | | | |
| | | | | | | | | |
| Concentra | ation Units | (ug/L, ug or m | ng/kg dry weigh | ıt): m | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | *************************************** | | | me |
| | 7440-36-0 | Antimony | 0.53 | J | N | MS | 1.30 | JAN WA |
| | 7440-38-2 | Arsenic | 17.7 | | E | MS | 1 '+ | "M, |
| | 7440-39-3 | Barium | 121. | | * | MS | - I | |
| | 7440-41-7 | Beryllium | 0.38 | J | E | MS | 0.63 | U M |
| | 7440-43-9 | Cadmium | 0.48 | J | | MS | 1.63 | J 71 |
| | 7440-70-2 | Calcium | | | | | 2000 | - , |
| | 7440-47-3 | Chromium | 6.9 | | | MS | | 1/ |
| | 7440-48-4 | Cobalt | 13.2 | | * | MS | I | |
| | 7440-50-8 | Copper | 63.6 | | | MS | | |
| | 7439-89-6 | Iron | | | | | | _ |
| • | 7439-92-1 | Lead | 379. | | E | MS | J | Ze |
| • | 7439-95-4 | Magnesium | | | | | 7 | |
| | 7439-96-5 | Manganese | 1420 | | | MS | | |
| Ì | 7439-97-6 | Mercury | | | · · · · · | | | |
| | 7440-02-0 | Nickel | 6.3 | | | MS | | |
| ľ | 7440-09-7 | Potassium | | | | | | |
| ļ | 7782-49-2 | Selenium | 0.55 | J | N | MS | 3.1 U | 丁不 |
| | 7440-22-4 | Silver | 1.3 | | N | MS | T+ | n |
| Ì | 7440-23-5 | Sodium | | | | | | |
| Ī | 7440-28-0 | Thallium | 0.30 | J | N | MS | T+ | U |
| Ţ | 7440-62-2 | Vanadium | 46.3 | | | MS | ন , | , |
| Ī | 7440-66-6 | Zinc | 184. | | E | MS | T | K |
| İ | 57-12-5 | Cyanide | | | · · · · · · · · · · · · · · · · · · · | - | ~ | 1.0/4 |
| ľ | 7.77.3' | - | | | | | | 11 K 2/18/u |
| ļ | | | | | - · · · · · · · · · · · · · · · · · · · | | | |
| color Bef | Tore: BROWN | Clarity | Before: | | Texture: ME | .DIUM | | |
| | | | After: CLEAR | | | | | - |
| 7-1 7-5 | | | | | | | | |

E: The reported value is estimated due to the presence of interference.

| | -10 | · |
|--------|-----|---|
| MH36L1 | | |
| | | |

| ab Name | e: ALS Labora | atory Group | Contract: | EPW090: | 36 | | | 3 |
|---------|----------------|----------------|---------------------------------------|--------------------------------|-------------|---------|-----|-----|
| | | | | Mod. Ref. No.: SDG No.: MH36L0 | | | | |
| latrix: | | | Lab Sample | | · · · · | | | |
| Solids | s: <u>74.7</u> | | Date Recei | ved: <u>1</u> | 1/03/2010 | | | |
| | | | | | | | | |
| oncenti | ration Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | /kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | 13100 | | | P | | |
| | 7440-36-0 | Antimony | | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 | Beryllium | | | | | | |
| | 7440-43-9 | Cadmium | | | | | | |
| | 7440-70-2 | Calcium | 2020 | | | P | | |
| | 7440-47-3 | Chromium | | | | | | |
| | 7440-48-4 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 35000 | | | P | | |
| | 7439-92-1 | Lead | | | | | | |
| | 7439-95-4 | Magnesium | 8970 | | | P | | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | <u> </u> | | | | | |
| | 7440-09-7 | Potassium | 501. | J | E | Р | ++ | M |
| | 7782-49-2 | Selenium | | | | | | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 21.9 | J | E | P | Tt | H |
| | 7440-28-0 | Thallium | | | | _ | J+ | al. |
| | 7440-62-2 | Vanadium | | | - | 1 | | 2/1 |
| | 7440-66-6 | Zinc | · · · · · · · · · · · · · · · · · · · | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | <u> </u> | 014111140 | - | | | | | |
| | | | | | | | | |
| Jor Do | fore: BROWN | Clari | tu Poforo: | <u> </u> | Texture: | CONDER | | |
| TOI DE | HOLE. BROWN | Crarr | ty Before: | | _ rextare. | COMINDE | | _ |
| olor Af | ter: YELLOW | Clari | ty After: CLEAR | | Artifacts | s: | | _ |
| omments | | | | | | | | |
| F. Th | e reported v | ralue is estim | mated due to the | presei | nce of inte | erferen | ce. | |

EPA SAMPLE NO.

MH36T.1

| | | | | | <u>L</u> | | | |
|----------|--------------|------------------|-------------------------|---------|--------------|------------|----------|---------------|
| Lab Name | : ALS Labora | ntory Group | Contract: | EPW09 | 036 | | | |
| Lab Code | : DATAC C | Case No.: 40755 | Mod. Ref. | No.: _ | | SDG No.: | мнз6г0 | |
| Matrix: | Soil | | Lab Sample | ID: | 10307710 | 02 | | |
| ₹ Solids | : 74.7 | | Date Recei | ved: | 11/03/20: | 10 | | |
| | | | | - | | | | |
| Concentr | ation Units | (ug/L, ug or m | ng/kg dry weigh | nt): mo | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | |] _ | |
| | 7440-36-0 | Antimony | 0.45 | J | N | MS | 1.3 | UJ |
| | 7440-38-2 | Arsenic | 28.1 | | E | MS | J | 7 |
| | 7440-39-3 | Barium | 90.8 | | * | MS | 17 | |
| | 7440-41-7 | Beryllium | 0.73 | | E | MS |] J+ | \mathcal{H} |
| | 7440-43-9 | Cadmium | 2.0 | | | MS | 7 ~ | ,- |
| | 7440-70-2 | Calcium | | | | | 7 . | |
| | 7440-47-3 | Chromium | 9.0 | | | MS | 1 | |
| | 7440-48-4 | Cobalt | 11.2 | | * | MS | 1 4 | -M |
| | 7440-50-8 | Copper | 193. | | | MS | | |
| | 7439-89-6 | Iron | | | | | | |
| | 7439-92-1 | Lead | 543. | 1 | E | MS | 11 | M |
| | 7439-95-4 | Magnesium | | 1 | _ | | → | |
| | 7439-96-5 | Manganese | 3650 | | D | MS | 1 | |
| | 7439-97-6 | Mercury | | | | | 1 | |
| | 7440-02-0 | Nickel | 5.2 | | | MS | 1 | |
| | 7440-09-7 | Potassium | | | | | + | |
| | 7782-49-2 | Selenium | 0.32 | J | N | MS | 22 | カモ |
| | 7440-22-4 | Silver | 1.7 | | N N | MS | 7.3 | V-1 |
| | 7440-23-5 | Sodium | # • / | - | 10 | 100 | ⊣ ન ' | |
| | 7440-23-3 | Thallium | 0.40 | J | N | MS | ++ | ~ |
| | 7440-28-0 | Vanadium | 32.2 | | IN | MS MS | -∤ ~ | , |
| | 7440-62-2 | Vanadium Zinc | 332. | - | E | MS | 1 | 7 |
| | | 1 | 332. | | <u>r</u> | MS | ~/ | _ / |
| | 57-12-5 | Cyanide | | | | | 1 | 21 |
| | | | | | | | 1 | |
| olo≂ P- | foro: PDOW | Classiter | Poforo | | Tovetor | O. MEDIEN | - | |
| отот ве | TOTE: DROWN | Clarity | ретоте: | | rextur | e: Maditum | ı | |
| color Af | ter: BROWN | Clarity | After: CLEAR | | Artifa | icts: | | |
| Comments | • | | | | | | | |
| | | _1 1 1 | والمناسبة المسلم المسام | | | | | |
| E: The | reported v | alue is estimat | tea aue to the | prese | ence of 1 | .nterierer | ice. | |
| | | | | | | | | |

| | | |
|------|--------------|--|
| | | |
| | | |
| | TATE OF CT O | |
| | MH36L2 | |
| | | |
| | | |

| Lab Name | : ALS Labora | atory Group | Contract: | EPW09 | 9036 | | |
|----------|--------------|----------------|-----------------|-------|---------------|---------------|-------------------------|
| Lab Code | e: DATAC (| Case No.: 4075 | Mod. Ref. | No.: | SDG | No.: <u>N</u> | 4H36L0 |
| Matrix: | Soil | | Lab Sample | E ID: | 1030771003 | | |
| % Solids | : 62.2 | | Date Recei | .ved: | 11/03/2010 | | |
| | | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt):n | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 5960 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | l | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 592. | J | | P | 804 U 7 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 116000 | | D | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 3260 | | | P | |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | · | ļ | | | |
| | 7440-02-0 | Nickel | | | | | - H |
| | 7440-09-7 | Potassium | 842. | | E | P | ~ ~ /~. |
| | 7782-49-2 | Selenium | | ļ | | \perp | |
| | 7440-22-4 | Silver | | | | | W |
| | 7440-23-5 | Sodium | 65.3 | J | Е | P | J+ 76 J+ 76 2/181 |
| | 7440-28-0 | Thallium | | | | | 1.01 |
| | 7440-62-2 | Vanadium | | | | \perp | 2/10/ |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | | |
| Color Be | fore: BROWN | Clarit | y Before: | | Texture: M | EDIUM | |
| Color Af | ter: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | |
| | | | | | | | |
| Comments | | | | | | _ | |
| E: The | reported v | alue is estim | ated due to the | pres | ence of inter | feren | ce. |
| | | | | | | | |
| | | | | | | | |
| • | | | | | | | |

| CAS No. Analyte Concertation Units (ug/L, ug or mg/kg) CAS No. Analyte Concertation Units (ug/L, ug or mg/kg) CAS No. Analyte Concertation (ug/L) Analyte Concertain (ug/L) | Date Received dry weightentration 0.86 62.5 121. 0.30 1.4 8.5 5.4 177. 546. 1130 4.5 | ved: 11/0 | 3/2010 | MS 1.6 MS 3 MS 0.8 MS MS MS MS MS MS MS MS MS MS MS MS MS M |
|--|--|-----------|-------------|--|
| CAS No. Analyte Concertation Units (ug/L, ug or mg/kg) CAS No. Analyte Concertage Aluminum 7440-36-0 Antimony 7440-38-2 Arsenic 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-95-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | dry weigh entration 0.86 62.5 121. 0.30 1.4 8.5 5.4 177. 546. 1130 4.5 | t): mg/kg | Q N E * E | MS 1.6 MS 7 MS 0.8 MS 0.8 MS MS MS 7 MS MS MS 7 MS MS MS MS MS MS MS MS MS MS MS MS MS M |
| CAS No. Analyte Concert 7429-90-5 Aluminum 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-95-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 0.86 62.5 121. 0.30 1.4 8.5 5.4 177. 546. | С | Q N E * E | MS 1.6 MS 7 MS 0.8 MS 0.8 MS MS MS 7 MS MS MS 7 MS MS MS MS MS MS MS MS MS MS MS MS MS M |
| CAS No. Analyte Concert 7429-90-5 Aluminum 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-95-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 0.86 62.5 121. 0.30 1.4 8.5 5.4 177. 546. | С | Q N E * E | MS 1.6 MS 7 MS 0.8 MS 0.8 MS MS MS 7 MS MS MS 7 MS MS MS MS MS MS MS MS MS MS MS MS MS M |
| 7429-90-5 Aluminum 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-95-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 0.86 62.5 121. 0.30 1.4 8.5 5.4 177. 546. | J | N E * E | MS 1.6 MS 7 MS 0.8 MS 0.8 MS MS MS 7 MS MS MS 7 MS MS MS MS MS MS MS MS MS MS MS MS MS M |
| 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-95-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 62.5 121. 0.30 1.4 8.5 5.4 177. 546. | | E * E | MS J J MS MS MS MS MS MS MS MS MS MS MS MS MS |
| 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-23-5 Sodium | 62.5 121. 0.30 1.4 8.5 5.4 177. 546. | | E * E | MS J J MS MS MS MS MS MS MS MS MS MS MS MS MS |
| 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-23-5 Sodium | 121. 0.30 1.4 8.5 5.4 177. 546. 1130 4.5 | J | * E * | MS J J MS MS MS MS MS MS MS MS MS MS MS MS MS |
| 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 0.30 1.4 8.5 5.4 177. 546. | J | * * | MS O.8 MS MS T MS MS MS T MS MS T MS MS T MS MS T MS MS T MS MS T MS MS T MS MS MS T |
| 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 1.4 8.5 5.4 177. 546. 1130 | J | * E | MS MS MS MS MS MS MS MS MS MS MS |
| 7440-43-9 Cadmium 7440-70-2 Calcium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 8.5 5.4 177. 546. 1130 | | E | MS MS MS MS MS MS MS MS MS MS MS |
| 7440-70-2 Calcium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 5.4 177. 546. 1130 4.5 | | E | MS MS J MS MS |
| 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 5.4 177. 546. 1130 4.5 | | E | MS MS J MS MS |
| 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 177. 546. 1130 4.5 | | E | MS J MS MS |
| 7440-50-8 Copper 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 546. 1130 4.5 | | | MS J |
| 7439-89-6 Iron 7439-92-1 Lead 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 1130 | | | MS MS |
| 7439-95-4 Magnesium 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 1130 | | | MS MS |
| 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 4.5 | | D | MS |
| 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 4.5 | | D | MS |
| 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | | | | |
| 7440-09-7 Potassium 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | | | | |
| 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium | 0.86 | | | |
| 7440-22-4 Silver 7440-23-5 Sodium | 0.86 | 1 | İ | |
| 7440-23-5 Sodium | | J | Й | MS 4.0 MS 7+ |
| 1 | 5.1 | | N | MS J+ |
| 7440-28-0 Thallium | | | | 1 |
| | 0.30 | J | N | MS J+ |
| 7440-62-2 Vanadium | 42.6 | | | MS |
| 7440-66-6 Zinc | 444. | | E | MS J+ |
| 57-12-5 Cyanide | | | | |
| | | | | |
| | | | | |
| | | • | | <u>,</u> |
| lor Before: BROWN Clarity Befo | ore: | Te | exture: MEI | MUIC |
| TO CLASSIC DEPOSITION OF THE PROPERTY OF THE P | or Eac | 71. | wtifacta: | |
| lor After: BROWN Clarity Afte | er: <u>CLEAR</u> | A: | rtifacts: _ | |

| MH36L3 | |
|--------|--|

| | | | | | 1 | | | _ |
|---------|------------------------|----------------------|---|----------------|----------------|---------|----------|-------------|
| ab Name | : ALS Labora | atory Group | Contract: | EPW0903 | 6 | | | _ |
| ıb Code | : DATAC C | Case No.: 40755 | Mod. Ref. | No.: | : SDG No.: MH3 | | н36L0 | _ |
| trix: | Soil | | Lab Sample | ID: <u>10</u> | 30771004 | | | _ |
| Solids | : 70.9 | | Date Recei | ved: <u>11</u> | /03/2010 | | | |
| ncentr | ation Units | (ua/L. ua or | mg/kg dry weigh | it): ma/ | ka | | | |
| | CAS No. | Analyte | Concentration | c | | Тм | | |
| | | | | <u> </u> | 2 | | | |
| | 7429-90-5 | Aluminum | 12200 | | | P | | |
| | 7440-36-0 | Antimony | *************************************** | | | | | |
| | 7440-38-2 | Arsenic | | | | | | |
| | 7440-39-3 | Barium | | | | | | |
| | 7440-41-7 7440-43-9 | Beryllium Cadmium | | | | | | |
| | 7440-43-9 | Calcium | 1110 | | | P | | |
| | 7440-70-2 | Chromium | 1110 | | | E | | |
| | 7440-47-3 | Cobalt | | | | | | |
| | 7440-50-8 | Copper | | | | | | |
| | 7439-89-6 | Iron | 31900 | | | P | | |
| | 7439-89-0 | Lead | 21.700 | | | | | |
| | 7439-95-4 | Magnesium | 5340 | | | P | | |
| | 7439-96-5 | Manganese | | | | | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | | | | | | - |
| | 7440-09-7 | Potassium | 648. | | E | P | J+ J+ | 7 |
| | 7782-49-2 | Selenium | 0.201 | | | 1 | 7 | |
| | 7440-22-4 | Silver | | | | | | |
| | 7440-23-5 | Sodium | 29.5 | J | E, | P | J+ | |
| | 7440-28-0 | Thallium | | | | 1 | • | al |
| | 7440-62-2 | Vanadium | | | | | | 01 |
| | 7440-66-6 | Zinc | | | | | | |
| | 57-12-5 | Cyanide | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| lor Be | fore: BROWN | Clarit | y Before: | | Texture: N | MEDIUM | | |
| lor Af | ter: YELLOW | Clarity | y After: CLEAR | | Artifacts | : | | |
| mmont a | • | | | | | | | |
| mments | | | - ۱۰ میل اسمیل | ~~~~ | aa af imt | rfo-so- | 20 | |
| ь: l'he | e reported v | alue is estima | ted due to the | presen | ce or inter | rreren | Je. | _ |

| MΉ | 3 | 6L | . 3 | |
|----|---|----|-----|--|

| Code | e: DATAC C | Case No.: <u>407</u> | 55 Mod. Ref. | No.: _ | SDG | No.: M | H36L0 | |
|--------|----------------|----------------------|-----------------|---------|-------------|-------------|------------------|------|
| rix: | Soil | | Lab Sample | ID: 1 | L030771004 | | | _ |
| Solids | s: <u>70.9</u> | | Date Recei | ved: 1 | 11/03/2010 | | | |
| ncenti | cation Units | (ug/L, ug or | mg/kg dry weigh | it): mg | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | | _ |
| | 7440-36-0 | Antimony | 0.45 | J | N | MS | 1.4 (| ソゴ ' |
| | 7440-38-2 | Arsenic | 36.8 | | E | MS | I | n |
| | 7440-39-3 | Barium | 147. | | * | MS | | -72 |
| | 7440-41-7 | Beryllium | 1.4 | | E | MS | 7+ | H |
| | 7440-43-9 | Cadmium | 7.4 | | | MS | | |
| | 7440-70-2 | Calcium | | | | | | |
| | 7440-47-3 | Chromium | 9.6 | | | MS | | |
| | 7440-48-4 | Cobalt | 12.9 | | * | MS | 7 | , |
| | 7440-50-8 | Copper | 546. | | | MS | | |
| | 7439-89-6 | Iron | | | | | | H |
| | 7439-92-1 | Lead | 779. | | DE | MS | I | 1 |
| | 7439-95-4 | Magnesium | | | | | | |
| | 7439-96-5 | Manganese | 5130 | | D | MS | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | 6.9 | | | MS | | |
| | 7440-09-7 | Potassium | | | | | | |
| | 7782-49-2 | Selenium | 0.70 | J | N | MS | 3.5 | UJ |
| | 7440-22-4 | Silver | 2.8 | | N | MS | J+ | 7 |
| | 7440-23-5 | Sodium | | | | | | -7 |
| | 7440-28-0 | Thallium | 0.40 | J | N | MS | 3.5° T+ T+ | |
| | 7440-62-2 | Vanadium | 33.2 | | | MS | | 11 |
| | 7440-66-6 | Zinc | 1990 | | DE | MS | I | 1 |
| | 57-12-5 | Cyanide | | | | | | 2/18 |
| | | | | | | | | |
| or Be | efore: BROWN | Clari | ty Before: | | Texture: 1 | MEDIUM | | _ |
| or Af | ter: BROWN | Clari | ty After: CLEAR | | _ Artifacts | : | | _ |
| ments | • • | | | | | | | |

| мнз | 61.4 | |
|-----|------|--|
| | OTIZ | |

| Matrix: | Soil | | Lab Sample | ID: | 1030771005 | | |
|-------------------|--------------|--------------|---|--------|--------------|--------------|-------------------------|
| & Solids | : 48.8 | | Date Recei | ved: _ | 11/03/2010 | | |
| | | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): mg | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429905 | Aluminum | 8140 | | | P | - |
| | 7440-36-0 | Antimony | | | | ļ — | 1 |
| | 7440-38-2 | Arsenic | | | | |] |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | |] |
| | 7440-70-2 | Calcium | 851. | J | | P | 10350 V |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | |] |
| | 7440-50-8 | Copper | | | | | _ |
| | 7439-89-6 | Iron | 154000 | | D | P | |
| | 7439-92-1 | Lead | | | | | <u> </u> |
| | 7439-95-4 | Magnesium | 4670 | | | Р | j |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | J+ 7/ J+ 7/ 2/18/ |
| | 7440-09-7 | Potassium | 1120 | | E | P | 14 |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | N |
| | 7440-23-5 | Sodium | 98.1 | J | E | P | J+ ~ |
| | 7440-28-0 | Thallium | | | | L | 2/18/ |
| | 7440-62-2 | Vanadium | | | | ļ | ','-' |
| | 7440-66-6 | Zinc | | | | <u> </u> | |
| | 57-12-5 | Cyanide | | | | | |
| | | | <u>-, · · · · , - · · · · - · · · · ·</u> | | | | |
| | | J | <u> </u> | | | <u> </u> | |
| Color Be | fore: BROWN | Clarit | y Before: | | Texture: MI | EDIUM | |
| 1-1 7. <i>E</i> . | ar. VELLOW | Clarit | y After: CLEAR | | Artifacts: | | |
| | COT * YDDDOM | CIALIC | y Alcer. Cheve | | _ HICTIACCS. | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MH36L4

| ıb Cod | e: DATAC | Case No.: <u>407</u> | 55 Mod. Ref. | No.: | SDG | No.: <u>I</u> | 4H36L0 |
|--------|----------------|----------------------|------------------|------------|--------------|---------------|------------------------|
| atrix: | Soil | Lab Sample | ID: | 1030771005 | | | |
| Solid | s: <u>48.8</u> | | Date Recei | ved: | 11/03/2010 | | |
| | | | | | | | |
| oncent | ration Units | (ug/L, ug or | mg/kg dry weigh | it): n | ng/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 1 / |
| | 7440-36-0 | Antimony | 1.7 | J | N | MS | 2.005 |
| | 7440-38-2 | Arsenic | 86.3 | | E | MS | 15 % |
| | 7440-39-3 | Barium | 168. | | * | MS | |
| | 7440-41-7 | Beryllium | 0.34 | J | E | MS | 100% |
| | 7440-43-9 | Cadmium | 1.2 | | | MS | 1 |
| | 7440-70-2 | Calcium | | | | | 1 |
| | 7440-47-3 | Chromium | 9.8 | | | MS | 1 |
| | 7440-48-4 | Cobalt | 6.1 | | * | MS | I H |
| | 7440-50-8 | Copper | 251. | | · | MS | , |
| | 7439-89-6 | Iron | | | | ***** | 1// |
| | 7439-92-1 | Lead | 656. | | E | MS | J |
| | 7439-95-4 | Magnesium | | | | |]] |
| | 7439-96-5 | Manganese | 1400 | | D | MS | · |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | 4.8 | | | MS | 1 |
| | 7440-09-7 | Potassium | | | | | 1 - |
| | 7782-49-2 | Selenium | 1.2 | Ĵ | N | MS | 5.1 UJ Th |
| | 7440-22-4 | Silver | 7.5 | | N | MS | 7+ 1/4 |
| | 7440-23-5 | Sodium | | | | | |
| | 7440-28-0 | Thallium | 0.31 | J | N | MS | T+ 2 |
| | 7440-62-2 | Vanadium | 44.3 | | | MS | 7, |
| | 7440-66-6 | Zinc | 464. | | E | MS | IM |
| | 57-12-5 | Cyanide | | | | | J+ K J K 2/18/11 |
| | | _ | | | | | 211011 |
| | | | | | | | |
| | | | | | | | 1 |
| lor Be | efore: BROWN | Clari | ty Before: | | Texture: | MEDIUM | |
| lor A | fter: BROWN | Clari | ty After: CLEAR | | Artifacts | : | · |
| mments | = • | | | | | | |
| | | roluo ia cati | nntad dua ta tha | n.m.o.o | ongo of into | rfo~~~ | GG |
| E: Th | e reported t | raiue is estir | mated due to the | pres | ence of inte | rreren | .ce. |

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | | |

| | | | | | | мн361 | 5 |
|----------|--------------------------------|---------------|------------------------|---------------|--------------|---------------|-----------|
| Lab Name | Lab Name: ALS Laboratory Group | | | EPW090 | 36 | | |
| Lab Code | ab Code: DATAC Case No.: 40755 | | | No.: _ | SDG N | 10.: <u>M</u> | 136L0 |
| Matrix: | Soil | | Lab Sample | ID: <u>1</u> | 030771008 | | |
| % Solids | : 31.6 | | Date Recei | ved: <u>1</u> | 1/03/2010 | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg | /kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 5480 | | | P | |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1540 | | | P | 1580 1 |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 359000 | | D | P | |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 644. | J | | P | |
| | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | | | | |
| | 7440-02-0 | Nickel | | | | | |
| | 7440-09-7 | Potassium | 146. | J | E | P | 1+, |
| | 7782-49-2 | Selenium | | | | | |
| | 7440-22-4 | Silver | | | | | _ 70 |
| | 7440-23-5 | Sodium | 31.2 | J | E | P | Jt " |
| | 7440-28-0 | Thallium | | | | | J+ 11 2/1 |
| | 7440-62-2 | Vanadium | | | | | 2/1 |
| | 7440-66-6 | Zinc | | | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | | | | | | |
| | | | | | | | |
| Color Be | fore: ORANGE | Clarit | y Before: | | Texture: M | EDIUM | |
| | | | | | | | |
| Color Af | ter: YELLOW | Clarit | ty After: <u>CLEAR</u> | | _ Artifacts: | | |
| a | _ | | | | | | |
| Comments | - | | | | E 4 | £ | |
| mb. | reported v | alue is estim | ated due to the | presei | nce of inter | rerenc | e. |

| MH36L5 | |
|--------|--|

| | | | | | <u> </u> | | | | | |
|---|--------------|-----------------------|---------------|---------------------------|----------------|------------------|---|--|--|--|
| Lab Name | : ALS Labora | tory Group | _ Contract: 1 | Contract: EPW09036 | | | | | | |
| Lab Code | : DATAC C | ase No.: <u>40755</u> | _ Mod. Ref. | Ref. No.: SDG No.: MH36L0 | | | | | | |
| Matrix: | Soil | | Lab Sample | ID: | 1030771008 | | | | | |
| % Solids | : 31.6 | | Date Recei | ved: | 11/03/2010 | | | | | |
| • | | · | | | | | | | | |
| Concentr | ation Units | (ug/L, ug or mg/ | /kg dry weigh | it): n | ng/kg | | | | | |
| | | <u> </u> | | Γ | <u> </u> | | 1 | | | |
| | CAS No. | J | ncentration | С | Q | M | _ | | | |
| | 7429-90-5 | Aluminum | | | | ļ <u>.</u> | 3,205 | | | |
| | 7440-36-0 | Antimony | 0.31 | J | N | MS | 3,201 | | | |
| | 7440-38-2 | Arsenic | 19.1 | | E | MS | 1.60 A 1.60 | | | |
| | 7440-39-3 | Barium | 17.4 | | * | MS | 3/10/1 | | | |
| | 7440-41-7 | Beryllium | 0.79 | J | E | MS | 1.60 | | | |
| | 7440-43-9 | Cadmium | 0.23 | J | | MS | 1.60 2 | | | |
| | 7440-70-2 | Calcium | | | | | 1/ | | | |
| | 7440-47-3 | Chromium | 2.6 | J | | MS | 3.20 Th | | | |
| | 7440-48-4 | Cobalt | 1.5 | J | * | MS | 1.6UJ X | | | |
| | 7440-50-8 | Copper | 20.2 | | | MS | | | | |
| | 7439-89-6 | Iron | | | | | _ 10 | | | |
| | 7439-92-1 | Lead | 115. | | E | MS | J | | | |
| | 7439-95-4 | Magnesium | | | | | _ | | | |
| | 7439-96-5 | Manganese | 280. | | | MS | | | | |
| | 7439-97-6 | Mercury | | | | | 1 | | | |
| | 7440-02-0 | Nickel | 1.2 | J | | MS | 11.60 | | | |
| • | 7440-09-7 | Potassium | | | | | 1 | | | |
| | 7782-49-2 | Selenium | 0.16 | J | И | MS | 17.9UI " | | | |
| | 7440-22-4 | Silver | 0.31 | J | N | MS | 166UTA | | | |
| | 7440-23-5 | Sodium | | | | | 1,000 | | | |
| | 7440-28-0 | Thallium | 1.6 | U | Ŋ | MS | 1.60 A 7.90 T 1.60 T 1 H 1 T 2/18/11 | | | |
| | 7440-62-2 | Vanadium | 45.9 | | | MS | -n/ | | | |
| | 7440-66-6 | Zinc | 282. | | E | MS | T | | | |
| | 57-12-5 | Cyanide | | | | | 1 2/18/11 | | | |
| | | | | | | | 1 | | | |
| | | | | <u></u> | | | | | | |
| Color Be | fore: ORANGE | Clarity E | Before: | | Texture: F | INE | | | | |
| Color Af | ter: COLORLE | SS Clarity A | After: CLEAR | | Artifacts: | | | | | |
| | | <u></u> | | | | | | | | |
| Comments | | | | | | <i>-</i> ـ ـ ـ ع | | | | |
| E: The | e reported v | alue is estimate | d due to the | pres | sence of inter | reren | ice. | | | |
| | | | | | | | | | | |

| MH36L6 | |
|--------|--|
| мизошо | |

| b Code | : DATAC C | Case No.: <u>4075</u> | 5 Mod. Ref. | No.: | SDG | No.: M | H36L0 |
|---------|--------------|-----------------------|-----------------------|--|---|--------|------------|
| trix: | Soil | | Lab Sample | ID: <u>10</u> | 30771009 | | |
| Solids | : 52.6 | | Date Recei | ved: <u>11</u> | /03/2010 | | |
| | | | | | | | |
| oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | t): mg/ | kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | 7030 | | | P | |
| | 7440-36-0 | Antimony | | | • | | |
| | 7440-38-2 | Arsenic | | | • | | |
| | 7440-39-3 | Barium | | | | | |
| | 7440-41-7 | Beryllium | | | | | |
| | 7440-43-9 | Cadmium | | | | | |
| | 7440-70-2 | Calcium | 1420 | | | P | |
| • | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | |
| | 7439-89-6 | Iron | 114000 | | D | P | |
| | 7439-92-1 | Lead | | | - | | |
| | 7439-95-4 | Magnesium | 3810 | <u> </u> | | P | |
| - | 7439-96-5 | Manganese | | | | | |
| | 7439-97-6 | Mercury | | . | | | |
| | 7440-02-0 | Nickel | | | | | |
| | 7440-09-7 | Potassium | 1560 | | E | P | J+ 7 7 2/1 |
| | 7782-49-2 | Selenium | | | | | 7 |
| | 7440-22-4 | Silver | | | | | -2 |
| | 7440-23-5 | Sodium | 118. | J | E | P | J+ " |
| | 7440-28-0 | Thallium | | | | | - 1 |
| | 7440-62-2 | Vanadium | | | | | 2/1 |
| | 7440-66-6 | Zinc | | <u> </u> | | | |
| | 57-12-5 | Cyanide | | | | | |
| | | -1 | | | | | |
| | | | | | | | |
| | | | | I | *************************************** | ŀ | |
| olor Be | fore: ORANGI | E Clarit | y Before: | | Texture: 1 | MUIGAN | |
| | | | | | _ | | |
| olor Af | ter: YELLOW | Clarit | y After: <u>CLEAR</u> | | Artifacts | : | • |
| | | | | | | | |
| omments | | | | | | _ | |
| E: The | reported v | alue is estim | ated due to the | presen | ce of inte | rteren | ce. |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. MH36L6

| Lab Name | : ALS Labora | tory Group | Contract: | EPW09 | 036 | | | |
|-----------|--------------|----------------------|-----------------|--------|---|---------------|--------------|-------------|
| Lab Code | : DATAC C | ase No.: <u>4075</u> | Mod. Ref. | No.: | SDG N | 10.: <u>F</u> | ин36L0 | |
| Matrix: | Soil | | Lab Sample | ID: | 1030771009 | | | |
| % Solids | : 52.6 | | Date Recei | ved: | 11/03/2010 | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): m | g/kg | | | |
| | CAS No. | Analyte | Concentration | С | Q | М | | |
| | 7429-90-5 | Aluminum | | | | | 1 | _ |
| | 7440-36-0 | Antimony | 2.8 | | N | MS | J | M |
| | 7440-38-2 | Arsenic | 50.2 | | E | MS | 17 | 7 - Ks |
| | 7440-39-3 | Barium | 146. | | * | MS | | 131 |
| | 7440-41-7 | Beryllium | 0.46 | J | E | MS | 0.99 | 50 R |
| | 7440-43-9 | Cadmium | 2.9 | | | MS | ", " | , |
| | 7440-70-2 | Calcium | | | | | 1 | υ A |
| | 7440-47-3 | Chromium | 8.4 | | | MS | 1 | 1/3/10/3/10 |
| | 7440-48-4 | Cobalt | 3.9 | | * | MS | 3 | -12 3110 |
| | 7440-50-8 | Copper | 279. | | | MS | | |
| | 7439-89-6 | Iron | | | | | | -20 |
| | 7439-92-1 | Lead | 5720 | | DE | MS | 5 | |
| | 7439-95-4 | Magnesium | | | | | | |
| | 7439-96-5 | Manganese | 1340 | | D | MS | | |
| | 7439-97-6 | Mercury | | | | | | |
| | 7440-02-0 | Nickel | 3.8 | | | MS | 1 | |
| | 7440-09-7 | Potassium | | | | | 1 | N |
| • | 7782-49-2 | Selenium | 1.4 | J | N | MS | 4.8 | UJ |
| | 7440-22-4 | Silver | 12.1 | | N | MS | 7+ | 72 |
| | 7440-23-5 | Sodium | | | *************************************** | | ` | - |
| | 7440-28-0 | Thallium | 0.60 | J | N | MS | T+ | UIN |
| | 7440-62-2 | Vanadium | 47.7 | | | MS | | |
| | 7440-66-6 | Zinc | 815. | | Е | MS | 1 | H |
| ì | 57-12-5 | Cyanide | | | | | ~ | 2/18/11 |
| | | | | | | | 1 | * 1 · · · |
| | | | | | | | 1 | |
| Color Be | Eore: ORANGE | Clarit | y Before: | | Texture: F | INE | | <u>-</u> |
| Color Aft | er: WHITE | Clarit | y After: CLOUD | ζ | Artifacts: | | | |
| Comments: | <u>.</u> | | | | | , | | |
| | | alue is estim | ated due to the | pres | ence of inter | feren | ce. | _ |
| | | | | | | | | |
| | | • | | | | | | _ |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH36L7 | |

| | o Code | : DATAC C | Case No.: 407 | Mod. Ref. | No.: | SDG | No.: M | H36L0 |
|---|---------|--------------|---------------|------------------------|---------------|--------------|----------|-------|
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 9570 P 7440-36-0 Antimony 7440-38-2 Arsenic 7440-41-7 Beryllium 7440-47-3 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-99-1 Lead 7439-95-4 Magnesium 7439-95-6 Marcury 7440-02-0 Nickel 7440-09-7 Potassium 7440-09-7 Potassium 7440-23-5 Sodium 7440-22-4 Vanadium 7440-22-2 Vanadium 7440-66-6 Zinc | atrix: | Soil | | Lab Sample | ID: 10 | 030771010 | | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 9570 P 7440-36-0 Antimony | 0-1:4- | . 76 0 | | Data Pagei | ved: 1 | 1/03/2010 | | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 9570 P 7440-36-0 Antimony P 7440-38-2 Arsenic P 7440-39-3 Barium P 7440-41-7 Beryllium P 7440-43-9 Cadmium P 7440-47-3 Chromium P 7440-48-4 Cobalt Cobalt 7440-50-8 Copper P 7439-89-6 Iron 57600 P 7439-95-1 Lead P 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese P 7440-02-0 Nickel Nickel P 7440-09-7 Potassium 751. E P 7440-22-4 Silver P P 7440-23-5 Sodium 62.3 J E P 7440-66-6 Zinc Zinc P | SOLIUS | : 10.0 | | Date Recei | vea. <u>.</u> | 170372010 | | _ |
| 7429-90-5 Aluminum 9570 P 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 57600 P 7439-92-1 Lead 7439-95-4 Magnesium 6070 P 7439-97-6 Mercury 7440-02-0 Nickel 7440-03-7 Potassium 751. E P 7782-49-2 Selenium 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium 7440-62-2 Vanadium 7440-66-6 Zinc | oncentr | ation Units | (ug/L, ug or | mg/kg dry weigh | ıt): mg, | /kg | | |
| 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-47-3 Chromium 7440-50-8 Copper 7439-89-6 Iron 57600 P 7439-92-1 Lead 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese 7439-97-6 Mercury 7440-09-7 Potassium 751. E P 7782-49-2 Selenium 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium 7440-62-2 Vanadium 7440-62-2 Vanadium 7440-66-6 Zinc | | CAS No. | Analyte | Concentration | С | Q | М | |
| 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1530 7440-47-3 Chromium 7440-48-4 Cobalt 7439-89-6 Iron 57600 7439-92-1 Lead 7439-95-4 Magnesium 6070 P P 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 751. E P 7440-22-4 Silver 7440-28-0 Thallium 7440-66-6 Zinc | | 7429-90-5 | Aluminum | 9570 | | | P | |
| 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1530 7440-47-3 Chromium 7440-48-4 Cobalt 7439-89-6 Iron 57600 7439-92-1 Lead 7439-95-4 Magnesium 6070 P P 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 751. F P 7440-22-4 Silver 7440-23-5 Sodium 62.3 J F P 7440-66-6 Zinc P | | 7440-36-0 | Antimony | | | <u>-</u> - | | |
| 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1530 7440-47-3 Chromium 7440-48-4 Cobalt 7449-89-6 Tron 57600 7439-92-1 Lead 7439-95-4 Magnesium 6070 P P 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 751. F P 7440-22-4 Silver 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc P | | 7440-38-2 | | | | | | |
| 7440-43-9 Cadmium 1530 P 7440-70-2 Calcium 1530 P 7440-47-3 Chromium Chromium Cobalt 7440-50-8 Copper Copper 7439-89-6 Iron 57600 P 7439-92-1 Lead Copper D 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese Copper Copper Copper 7440-02-0 Nickel Copper P 7439-95-4 Magnesium 6070 P P P P P P P P P P P P P P P P </td <td></td> <td>7440-39-3</td> <td>Barium</td> <td></td> <td></td> <td></td> <td></td> <td></td> | | 7440-39-3 | Barium | | | | | |
| 7440-70-2 Calcium 1530 P 7440-47-3 Chromium P 7440-48-4 Cobalt Copper 7439-89-6 Iron 57600 P 7439-92-1 Lead P 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese P 7440-02-0 Nickel P 7440-09-7 Potassium 751. E P 7440-22-4 Silver P P 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium P <td></td> <td>7440-41-7</td> <td>Beryllium</td> <td></td> <td></td> <td></td> <td></td> <td></td> | | 7440-41-7 | Beryllium | | | | | |
| 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 57600 P 7439-92-1 Lead 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-02-0 Selenium 7440-22-4 Silver 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | | 7440-43-9 | Cadmium | | | | | |
| 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 57600 7439-92-1 Lead 7439-95-4 Magnesium 6070 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 751. F P 7782-49-2 Selenium 7440-22-4 Silver 7440-28-0 Thallium 7440-66-6 Zinc | | 7440-70-2 | Calcium | 1530 | | | P | |
| 7440-50-8 Copper 7439-89-6 Iron 57600 P 7439-92-1 Lead P 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese P 7440-02-0 Nickel P 7440-09-7 Potassium 751. E P 7782-49-2 Selenium P P 7440-22-4 Silver Sodium 62.3 J E P 7440-28-0 Thallium P P P 7440-62-2 Vanadium Vanadium P 7440-66-6 Zinc C C | | 7440-47-3 | Chromium | | | | | |
| 7439-89-6 Iron 57600 P 7439-92-1 Lead P 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese P 7440-02-0 Nickel P 7440-09-7 Potassium 751. E P 7782-49-2 Selenium P P 7440-22-4 Silver Silver P 7440-28-0 Thallium P P 7440-62-2 Vanadium Vanadium P | | 7440-48-4 | Cobalt | | | | | |
| 7439-92-1 Lead 6070 P 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese 9 10 7440-02-0 Mickel 10 10 7440-09-7 Potassium 751. E P 7782-49-2 Selenium 10 | | 7440-50-8 | Copper | | | | | |
| 7439-95-4 Magnesium 6070 P 7439-96-5 Manganese — 7439-97-6 Mercury — 7440-02-0 Nickel — 7440-09-7 Potassium 751. E P 7782-49-2 Selenium — — 7440-22-4 Silver — — 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium — — — 7440-66-6 Zinc — — — | | 7439-89-6 | Iron | 57600 | | | P | |
| 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 751. E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | | 7439-92-1 | Lead | | | | | |
| 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 751. E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 62.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | | 7439-95-4 | Magnesium | 6070 | | | P | |
| 7440-02-0 Nickel 7440-09-7 Potassium 751. E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 62.3 J E P 7740-28-0 Thallium 7440-66-6 Zinc | | 7439-96-5 | Manganese | | | | | |
| 7440-62-2 Vanadium 7440-66-6 Zinc | | 7439-97-6 | Mercury | | | | | |
| 7440-62-2 Vanadium 7440-66-6 Zinc | | 7440-02-0 | Nickel | | | | | ۱ |
| 7440-62-2 Vanadium 7440-66-6 Zinc | | 7440-09-7 | Potassium | 751. | | E | P | 1 4 |
| 7440-62-2 Vanadium 7440-66-6 Zinc | | 7782-49-2 | Selenium | | | | <u> </u> | |
| 7440-62-2 Vanadium 7440-66-6 Zinc | | 7440-22-4 | Silver | | | | | |
| 7440-66-6 Zinc | | 7440-23-5 | Sodium | 62.3 | J | E | P | 17+ |
| 7440-62-2 Vanadium 7440-66-6 Zinc | | 7440-28-0 | Thallium | | | | | |
| | | 7440-62-2 | Vanadium | | | | | |
| 57-12-5 Cyanide | | 7440-66-6 | Zinc | | | | | |
| | | 57-12-5 | Cyanide | | | | | |
| | | | | | | | | |
| | | | | <u></u> | | | | |
| Color Before: ORANGE Clarity Before: Texture: COARSE | olor Be | fore: ORANGI | E Clari | ty Before: | | Texture: (| COARSE | |
| | | | | · | | | | |
| Color After: YELLOW Clarity After: CLEAR Artifacts: | olor Af | ter: YELLOW | Clari | ty After: <u>CLEAR</u> | | _ Artifacts | : | |
| ~ . | | | | | | | | |
| Comments: E: The reported value is estimated due to the presence of interference | | | | | | | | |

EPA SAMPLE NO.

MH36L7

| Lab Name | e: ALS Labora | tory Group | Contract: I | EPW090 | 136 | | . |
|----------|---------------|---------------|-----------------|--|----------------|--------------|-------------------------------------|
| Lab Code | e: DATAC C | ase No.: 4075 | 5 Mod. Ref. | No.: _ | SDG 1 | ۱o.: آ | MH36L0 |
| Matrix: | Soil | | Lab Sample | ID: 1 | L030771010 | | |
| o della | | | Date Recei | d. 1 | 1/03/2010 | | |
| % Solid | S: /0.0 | | Date Recei | vea. | 11/03/2010 | | |
| Concent | ration Units | (ug/L, ug or | mg/kg dry weigh | t): mg | ı/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | 1 |
| | 7440-36-0 | Antimony | 0.45 | J | N | MS | 1,305 Th T Th Malulu 0.650 Th |
| | 7440-38-2 | Arsenic | 20.3 | | E | MS | 1 I ZKA 11 |
| | 7440-39-3 | Barium | 97.3 | | * | MS | 310 |
| | 7440-41-7 | Beryllium | 0.45 | J | E | MS | 0.650 12 |
| | 7440-43-9 | Cadmium | 0.90 | | | MS | _ |
| | 7440-70-2 | Calcium | | | | 1 | - LA |
| | 7440-47-3 | Chromium | 7.0 | | | MS | |
| | 7440-48-4 | Cobalt | 11.8 | | * | MS | 1 -4 310.1 |
| | 7440-50-8 | Copper | 86.5 | | | MS | 7 7 3(10)4 |
| | 7439-89-6 | Iron | | | | | - A |
| | 7439-92-1 | Lead | 726. | | DE | MS | 17 , |
| | 7439-95-4 | Magnesium | | | | 1.50 | |
| | 7439-96-5 | Manganese | 1530 | - | D | MS | - |
| | 7439-97-6 | Mercury | | | | Ma | 4 |
| | 7440-02-0 | Nickel | 4.4 | | | MS | 4 |
| | 7440-09-7 | Potassium | | - | 37 | MG | 2211 K |
| | 7782-49-2 | Selenium | 1.2 | J | N | MS | 3.3 UT # T+ # |
| | 7440-22-4 | Silver | 1.7 | - | N | MS | 1 ~ ~ ~ |
| | 7440-23-5 | Sodium | 0.20 | J | NY. | MS | I+ K3A 3/10/11 |
| | 7440-28-0 | Thallium | 0.39 | J | Ŋ | MS | |
| | 7440-62-2 | Vanadium | 47.3 261. | | E | MS | J |
| | 7440-66-6 | Zinc | 201. | - | <u> </u> | 113 | - Jelu |
| | 57-12-5 | Cyanide | | | | | - 7/10/11 |
| | | | | | | | - |
| | | <u> </u> | | <u> </u> | | | |
| Color B | efore: BROWN | Clarit | y Before: | | Texture: M | EDIUM | 1 |
| Color A | fter: BROWN | Clarit | y After: CLOUD | <u>. </u> | Artifacts: | | |
| Comment | e • | | | | | | |
| | | alvo is oatim | ated due to the | nrass | ence of inter | ferer | nce. |
| E: Th | ie reported v | arue is estim | ated due to the | Prese | PILCE OF THEFT | | 1001 |
| | ····· | | <u> </u> | | | | |
| | | | | | | | |

USEPA - CLP 1A-IN

INORGANIC ANALYSIS DATA SHEET

| EPA | SAMPLE | NO. |
|-----|--------|-----|
| | MH36L8 | |

| Solids: 79.5 Date Received: 11/03/2010 | Ab Code: DATAC Cantrix: Soil Solids: 79.5 CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | (ug/L, ug or Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | 5 Mod. Ref. Lab Sample Date Recei mg/kg dry weigh Concentration 10900 | No.: ID: ved: | SDG 1 1030771011 11/03/2010 ag/kg Q | M P | H36L0 | |
|--|--|---|--|-----------------|--|--------------|-----------|---------------|
| Date Received: 11/03/2010 Solids: 79.5 Date Received: 11/03/2010 Date Received | Solids: 79.5 CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-41-7 7440-47-3 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 | (ug/L, ug or Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | Lab Sample Date Recei mg/kg dry weigh Concentration 10900 | ID: ved: nt): m | 1030771011 11/03/2010 ng/kg Q | M P | H36L0 | |
| Atrix: Soil Lab Sample ID: 1030771011 Solids: 79.5 Date Received: 11/03/2010 CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 10900 P 7440-38-2 Arsenic | atrix: Soil Solids: 79.5 Oncentration Units CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-41-7 7440-41-7 7440-47-3 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 | (ug/L, ug or Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | Lab Sample Date Recei mg/kg dry weigh Concentration 10900 | ID: ved: nt): m | 1030771011 11/03/2010 ng/kg Q | M P | | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 10900 P 7440-36-0 Antimony 7440-38-2 Arsenic 7440-43-9 Cadmium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-47-3 Chromium 7440-8-4 Cobalt 7440-50-8 Copper 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-95-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-02-0 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thailium 7440-28-0 Thailium 7440-26-6 Zinc | CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | mg/kg dry weigh Concentration 10900 | nt): m | ng/kg Q | P | | _ |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 10900 P 7440-36-0 Antimony 7440-38-2 Arsenic 7440-41-7 Beryllium 7440-41-7 Beryllium 7440-47-3 Chromium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-95-5 Manganese 7439-97-6 Mercury 7440-09-7 Potassium 7440-09-7 Potassium 7440-22-4 Silver 7440-28-0 Thallium 7440-28-0 Thallium 7440-28-0 Thallium 7440-28-0 Thallium 7440-28-0 Thallium 7440-28-0 Thallium 7440-66-6 Zinc | CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | mg/kg dry weigh Concentration 10900 | nt): m | ng/kg Q | P | | |
| CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 10900 P 7440-36-0 Antimony P 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-48-4 Cobalt 7440-48-4 Cobalt 7439-89-6 Iron 37100 P 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-28-0 Thallium | CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | Concentration 10900 | 1 | Q | P | | |
| 7429-90-5 Aluminum 10900 P 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1890 P 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-99-6 Iron 37100 P 7439-99-1 Lead 7439-95-4 Magnesium 5380 P 7440-02-0 Nickel 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-66-6 Zinc | 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | 10900 | С | | P | | |
| 7440-36-0 Antimony 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-47-3 Chromium 7440-47-3 Chromium 7440-50-8 Copper 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-95-6 Mercury 7440-02-0 Nickel 7440-02-7 Selenium 7440-23-5 Sodium 99.3 J E P 7440-23-5 Sodium 7440-66-6 Zinc | 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | | | | | | |
| 7440-38-2 Arsenic 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1890 P 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-92-1 Lead 7439-92-1 Lead 7439-95-4 Magnesium 7439-95-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7440-22-4 Silver 7440-23-5 Sodium 7440-28-0 Thallium 7440-66-6 Zinc | 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt | 1890 | | | . 1 | | |
| 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1890 P 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 37100 P 7439-91 Lead 7439-95-4 Magnesium 7439-95-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7440-02-4 Silver 7440-23-5 Sodium 7440-28-0 Thallium 7440-66-6 Zinc | 7440-39-3 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Barium Beryllium Cadmium Calcium Chromium Cobalt | 1890 | | | | | |
| 7440-39-3 Barium 7440-41-7 Beryllium 7440-43-9 Cadmium 7440-70-2 Calcium 1890 P 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 37100 P 7439-91 Lead 7439-95-4 Magnesium 5380 P 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-02-0 Nickel 7440-22-4 Silver 7440-23-5 Sodium 7440-28-0 Thallium 7440-62-2 Vanadium 7440-66-6 Zinc | 7440-41-7 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Beryllium Cadmium Calcium Chromium Cobalt | 1890 | | | | | |
| 7440-43-9 Cadmium 7440-70-2 Calcium 1890 P 7440-47-3 Chromium | 7440-43-9 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Cadmium Calcium Chromium Cobalt | 1890 | | l | | | |
| 7440-70-2 Calcium 1890 P 7440-47-3 Chromium | 7440-70-2 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Calcium Chromium Cobalt | 1890 | | | | | |
| 7440-47-3 Chromium 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 37100 P 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Chromium Cobalt | 1890 | | | | | |
| 7440-48-4 Cobalt 7440-50-8 Copper 7439-89-6 Iron 37100 P 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thallium 7440-62-2 Vanadium 7440-66-6 Zinc | 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | Cobalt | | | | P | | |
| 7440-50-8 Copper 7439-89-6 Iron 37100 P 7439-92-1 Lead P 7439-95-4 Magnesium 5380 P 7439-97-6 Mercury 7440-02-0 Nickel P 7782-49-2 Selenium P 7440-22-4 Silver 7440-28-0 Thallium P 7440-66-6 Zinc | 7440-50-8 7439-89-6 7439-92-1 7439-95-4 | | | | | | | |
| 7439-89-6 | 7439-89-6 7439-92-1 7439-95-4 | | | | | | | |
| 7439-92-1 Lead 7439-95-4 Magnesium 5380 P 7439-96-5 Manganese 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | 7439-92-1 7439-95-4 | Copper | | | | | | |
| 7439-95-4 Magnesium 5380 P 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | 7439-95-4 | Iron | 37100 | | | P | | |
| 7439-96-5 Manganese 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 7440-22-4 Silver 7440-23-5 Sodium 7440-28-0 Thallium 7440-66-6 Zinc | | | | | | | | |
| 7439-97-6 Mercury 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thallium 7440-66-6 Zinc | 7439-96-5 | Magnesium | 5380 | | | P | Į | |
| 7440-02-0 Nickel 7440-09-7 Potassium 1000 E P 7782-49-2 Selenium 7440-22-4 Silver 7440-23-5 Sodium 99.3 J E P 7440-28-0 Thallium 7440-62-2 Vanadium 7440-66-6 Zinc | | Manganese | | | | | | |
| 7440-62-2 Vanadium | 7439-97-6 | Mercury | | | | 1 | | |
| 7440-62-2 Vanadium | 7440-02-0 | Nickel | | | | | , | - |
| 7440-62-2 Vanadium | 7440-09-7 | Potassium | 1000 | | E | P | 17 + | |
| 7440-62-2 Vanadium | 7782-49-2 | Selenium | | | | | | |
| 7440-62-2 Vanadium | | | | | | | ، ـــ | 1 |
| 7440-62-2 Vanadium | | | 99.3 | J | E | P P | 4+ | ٠٠ در |
| 7440-66-6 Zinc | | | | | ļ | | | 7 |
| | · · · · · · · · | | | | | | | |
| | | | | <u> </u> | | | | |
| 57-12-5 Cyanide | 57-12-5 | Cyanide | | ļ | | | | |
| | | | | | | | | |
| | Color Before: ORANGE | Clarit | y Before: | | Texture: 0 | OARSE | | |
| Color Before: ORANGE Clarity Before: Texture: COARSE | | | | | | | - | |
| | color After: YELLOW | Clarit | y After: CLEAR | | Artifacts: | | | |
| | | | | | | | | |
| Color After: YELLOW Clarity After: CLEAR Artifacts: | E: The reported va | alue is estim | ated due to the | pres | sence of inter | feren | ce. | |
| | | | | | | | | |

USEPA - CLP 1B-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO. MH36L8

| | | | | | · | | |
|----------|---|------------------------|-----------------|----------|-----------------|---------------|--------------|
| Lab Name | : ALS Labora | atory Group | Contract:] | EPW0903 | 36 | | |
| Lab Code | : DATAC C | Case No.: <u>40755</u> | Mod. Ref. | No.: _ | SDG | No.: <u>1</u> | 4H36L0 |
| Matrix: | Soil | · | Lab Sample | ID: 10 | 030771011 | | |
| s Solids | : 79.5 | | Date Recei | ved: 1 | 1/03/2010 | | |
| DOLLAD | . , , , , , , , , , , , , , , , , , , , | | 2000 110001 | | | | |
| Concentr | ation Units | (ug/L, ug or i | mg/kg dry weigh | ıt): mg/ | ′kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М | |
| | 7429-90-5 | Aluminum | | | | | |
| | 7440-36-0 | Antimony | 0.19 | J | И | MS | 1.305 |
| | 7440-38-2 | Arsenic | 17.3 | | E | MS | I n |
| | 7440-39-3 | Barium | 102. | | * | MS | J |
| | 7440-41-7 | Beryllium | 0.53 | J | E | MS | 0.63U |
| | 7440-43-9 | Cadmium | 0.12 | J | | MS | 0.630 |
| | 7440-70-2 | Calcium | | | | |] |
| | 7440-47-3 | Chromium | 8.0 | | | MS | - The |
| | 7440-48-4 | Cobalt | 10.4 | | * | MS | 1 |
| | 7440-50-8 | Copper | 73.1 | | | MS | |
| | 7439-89-6 | Iron | | | | | 7 |
| | 7439-92-1 | Lead | 532. | | Ē | MS |] 」 " |
| | 7439-95-4 | Magnesium | | | | |] |
| | 7439-96-5 | Manganese | 675. | | D | MS |] ' |
| | 7439-97-6 | Mercury | | | | | 1 |
| | 7440-02-0 | Nickel | 7.1 | | | MS | |
| | 7440-09-7 | Potassium | | | | |] |
| | 7782-49-2 | Selenium | 0.61 | J | N | MS | 3.1 UJ T+ |
| | 7440-22-4 | Silver | 1.3 | | N | MS | 17+ 7 |
| | 7440-23-5 | Sodium | | | | | J+ 7 7/2/ |
| | 7440-28-0 | Thallium | 0.35 | J | N . | MS | T+ 7 |
| | 7440-62-2 | Vanadium | 49.0 | | | MS | - 21 |
| | 7440-66-6 | Zinc | 73.8 | | E | MS |]] / |
| | 57-12-5 | Cyanide | | | | | 2/ |
| | | | | | | |] |
| | | | | | | |] |
| olor Be | fore: BROWN | Clarity | Before: | | Texture: C | OARSE | _ |
| color Af | ter: GRAY | Clarity | After: CLEAR | | - Artifacts: | ; | |
| | | | | | - | | |
| Comments | | | | | | | |
| E. The | reported v | alue is estima | ted due to the | preser | ace of inter | feren | .ce. |

| | | | | | | мн36 | L9 |
|----------|----------------|----------------------|------------------|---------|-----------|------------|------------------------|
| Lab Name | e: ALS Labor | atory Group | Contract: | EPW090 |)36 | | |
| Lab Code | e: DATAC | Case No.: <u>407</u> | 55 Mod. Ref. | No.: _ | | SDG No.: I | MH36L0 |
| Matrix: | Soil | | Lab Sample | ID: 1 | 103077101 | 12 | |
| % Solids | s: <u>20.1</u> | | Date Recei | ved: 1 | 11/03/201 | 10 | |
| Concenti | ration Units | s (ug/L, ug or | mg/kg dry weigh | ıt): mg | g/kg | | |
| | CAS No. | Analyte | Concentration | С | Q | М |] |
| | 7429-90-5 | Aluminum | 13400 | | | P | 1 |
| | 7440-36-0 | Antimony | | | | | |
| | 7440-38-2 | Arsenic | | | | |] |
| | 7440-39-3 | Barium | | | | | 1 |
| | 7440-41-7 | Beryllium | | | | |] |
| | 7440-43-9 | Cadmium | | | | | _ |
| | 7440-70-2 | Calcium | 2310 | J | | P | 2490 U |
| | 7440-47-3 | Chromium | | | | | |
| | 7440-48-4 | Cobalt | | | | | |
| | 7440-50-8 | Copper | | | | | 1 |
| | 7439-89-6 | Iron | 238000 | | D | Ъ |] |
| | 7439-92-1 | Lead | | | | | |
| | 7439-95-4 | Magnesium | 913. | J | | P | 1 |
| | 7439-96-5 | Manganese | | | | | 1 ' |
| | 7439-97-6 | Mercury | | | | | 1 |
| - | 7440-02-0 | Nickel | | | | | |
| | 7440-09-7 | Potassium | 231. | J | E | P | T+ " |
| | 7782-49-2 | Selenium | | | | | 1 7 |
| | 7440-22-4 | Silver | | | | | Ī |
| | 7440-23-5 | Sodium | 44.5 | J | E | P | T+ " |
| | 7440-28-0 | Thallium | | | | | 1 ` |
| | 7440-62-2 | Vanadium | | | | | J+ 21 J+ 21 Valt |
| | 7440-66-6 | Zinc | | | | | 1. K-5/9 1 |
| | 57-12-5 | Cyanide | | | | | 310111 |
| | | | | | | | |
| Color Be | fore: ORANG | E Clari | ty Before: | • | Textur | e: FINE | • |
| Color Af | ter: YELLOW | | ty After: CLEAR | | _ | .cts: | |
| | | | | | | | |
| Comments | | | | | | | |
| E: The | e reported v | value is estir | mated due to the | prese | nce of i | nterferen | ce. |
| | | | | | | | |
| • | | | | | | | |

EPA SAMPLE NO.

MH36L9

| | | | | | MIJC | 1119 |
|----------|--------------|----------------|-----------------|--------------|-------------|--------------------------------------|
| Lab Name | : ALS Labora | tory Group | Contract:] | EPW09036 | | |
| Lab Code | : DATAC C | Case No.: 4075 | 5 Mod. Ref. | No.: | SDG No.: | MH36L0 |
| Matrix: | Soil | | Lab Sample | ID: 1030771 | .012 | |
| % Solids | : 20.1 | | Date Recei | ved: 11/03/2 | 2010 | |
| | | | | | | |
| Concentr | ation Units | (ug/L, ug or | mg/kg dry weigh | nt): mg/kg | | |
| | CAS No. | Analyte | Concentration | С | Q M | |
| | 7429-90-5 | Aluminum | | | | - 7 |
| | 7440-36-0 | Antimony | 0.44 | J N | 1 MS | 5.0 UJ # 25.0 U 24.91 |
| | 7440-38-2 | Arsenic | 17.7 | Е | E MS | 7 7 |
| | 7440-39-3 | Barium | 21.4 | J * | · MS | 25.00 24.91 |
| | 7440-41-7 | Beryllium | 1.4 | J E | E MS | 2.5 U Th |
| | 7440-43-9 | Cadmium | 0.35 | J | MS | 2511 1 |
| | 7440-70-2 | Calcium | | | | |
| | 7440-47-3 | Chromium | 2.8 | J | MS | 5.00 H 2.50 J N |
| | 7440-48-4 | Cobalt | 1.5 | J * | MS | 2.50 J 72 |
| | 7440-50-8 | Copper | 28.1 | | MS | |
| | 7439-89-6 | Iron | <u> </u> | | | |
| | 7439-92-1 | Lead | 217. | E | E MS | 丁ガ |
| | 7439-95-4 | Magnesium | | | |] |
| - | 7439-96-5 | Manganese | 336. | | MS | |
| | 7439-97-6 | Mercury | | | | 7 |
| | 7440-02-0 | Nickel | 1.3 | J | MS | |
| | 7440-09-7 | Potassium | -··- | | | 74 |
| | 7782-49-2 | Selenium | 12.4 | U N | MS MS | 712,40丁 1 |
| | 7440-22-4 | Silver | 0.71 | J N | MS MS | 2.505 |
| | 7440-23-5 | Sodium | | | | |
| | 7440-28-0 | Thallium | 2.5 | U N | MS MS | 12,4UJ 7 2.5UJ 7 UI KoA shohii |
| | 7440-62-2 | Vanadium | 41.8 | | MS | I |
| | 7440-66-6 | Zinc | 269. | F | MS MS | 丁了, |
| | 57-12-5 | Cyanide | | | | Valt |
| | | | | | | 3/10/4 |
| | | | | | | 3100 |
| Color Be | fore: ORANGE | Clarit | y Before: | Text | ure: FINE | |
| Color Af | ter: COLORLE | ESS Clarit | y After: CLEAR | Arti | facts: | |
| _ | | | | _ | | |
| Comments | | | | | . . | |
| E: Th∈ | reported v | alue is estima | ated due to the | presence of | interfere | nce. |
| | | | | | | <u>.</u> |
| | | | | | | |

REGION VIII DATA VALIDATION REPORT INORGANIC

| Case No. / TDD No. | Site N | ame | Operable Unit |
|-----------------------|------------------------------|---|-----------------------|
| C101001 / 1008-13 | Upper Animas Mining District | | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | TDF No. | Laboratory DPO/Region |
| ESAT – TechLaw, Inc. | | DG-216 surface water and mine discharge | |

| Review Assigned Date March 28, 2011 | Data Validator <u>Diane Short & Assoc. Review</u> |
|---------------------------------------|---|
| Review Completion Date March 31, 2011 | Report Reviewer Kent Alexander |

| Station | Client ID | Lab ID | Sample Type |
|--|-----------|------------|--|
| Method 200.7 ICP, | | | The second secon |
| 200.8 ICPMS Total and Dissolved (D) | | | |
| A68 | UASW003 | C101101-01 | Charles Wilder |
| A72 | UASW029 | | Surface Water |
| | *** | C101101-02 | Surface Water |
| CC01F | UASW030 | C101101-03 | Surface Water |
| CC01S | UASW024 | C101101-04 | Surface Water |
| CC01T | UASW023 | C101101-05 | Surface Water |
| CC02A | UASW022 | C101101-06 | Surface Water |
| CC02D | UAAD004 | C101101-07 | Mine Discharge (D) |
| CC02D | UAAD004 | C101101-08 | Mine Discharge |
| CC03C | UAAD003 | C101101-09 | Mine Discharge (D) |
| CC03C | UAAD003 | C101101-10 | Mine Discharge |
| CC03D | UASW015 | C101101-11 | Surface Water |
| CC06 | UAAD002 | C101101-12 | Mine Discharge (D) |
| CC06 | UAAD002 | C101101-13 | Mine Discharge |
| CC17 | UASW005 | C101101-14 | Surface Water |
| CC17 DUP | UASW098 | C101101-15 | Surface Water |
| CC18 | UASW007 | C101101-16 | Surface Water |
| CC19 | UAAD001 | C101101-17 | Mine Discharge (D) |
| CC19 | UAAD001 | C101101-18 | Mine Discharge |



| Station | Client ID | Lab ID | Sample Type |
|-------------|-----------|------------|---------------|
| CC48 | UASW035 | C101101-19 | Surface Water |
| CC48 DUP | UASW097 | C101101-20 | Surface Water |
| CCOPP-12 | UASW016 | C101101-21 | Surface Water |
| M34 | UASW033 | C101101-22 | Surface Water |
| UASW001 | UASW001 | C101101-23 | Surface Water |
| UASW002 | UASW002 | C101101-24 | Surface Water |
| UASW004 | UASW004 | C101101-25 | Surface Water |
| UASW006 | UASW006 | C101101-26 | Surface Water |
| UASW008 | UASW008 | C101101-27 | Surface Water |
| UASW009 | UASW009 | C101101-28 | Surface Water |
| UASW010 | UASW010 | C101101-29 | Surface Water |
| UASW011 | UASW011 | C101101-30 | Surface Water |
| UASW012 | UASW012 | C101101-31 | Surface Water |
| UASW013 | UASW013 | C101101-32 | Surface Water |
| UASW014 | UASW014 | C101101-33 | Surface Water |
| UASW017 | UASW017 | C101101-34 | Surface Water |
| UASW018 | UASW018 | C101101-35 | Surface Water |
| UASW019 | UASW019 | C101101-36 | Surface Water |
| UASW019 DUP | UASW099 | C101101-37 | Surface Water |
| UASW020 | UASW020 | C101101-38 | Surface Water |
| UASW021 | UASW021 | C101101-39 | Surface Water |
| UASW032 | UASW032 | C101101-40 | Surface Water |
| UASW034 | UASW034 | C101101-41 | Surface Water |
| UASW036 | UASW036 | C101101-42 | Surface Water |
| UASW037 | UASW037 | C101101-43 | Surface Water |
| UASW039 | UASW039 | C101101-44 | Surface Water |
| UASW040 | UASW040 | C101101-45 | Surface Water |
| UASW041 | UASW041 | C101101-46 | Surface Water |
| UASW042 | UASW042 | C101101-47 | Surface Water |
| UASW043 | UASW043 | C101101-48 | Surface Water |
| UASW044 | UASW044 | C101101-49 | Surface Water |
| UASW045 | UASW045 | C101101-50 | Surface Water |
| UASW046 | UASW046 | C101101-51 | Surface Water |
| UASW047 | UASW047 | C101101-52 | Surface Water |
| UASW049 | UASW049 | C101101-53 | Surface Water |
| UASW050 | UASW050 | C101101-54 | Surface Water |
| UASW054 | UASW054 | C101101-55 | Surface Water |
| UASW056 | UASW056 | C101101-56 | Surface Water |
| UASW058 | UASW058 | C101101-57 | Surface Water |
| UASW059 | UASW059 | C101101-58 | Surface Water |

| Station | Client ID | Lab ID | Sample Type |
|-----------------------------------|-----------|------------|----------------|
| Analysis for Hardness SM 2340B | | | |
| CC02D | UAAD004 | C101101-07 | Mine Discharge |
| CC03C | UAAD003 | C101101-09 | Mine Discharge |
| CC06 | UAAD002 | C101101-12 | Mine Discharge |
| CC19 | UAAD001 | C101101-17 | Mine Discharge |

DATA QUALITY STATEMENT

| () | Data are ACCEPTABLE according to EPA Functional guidel by the reviewer. | ines with no qualifiers (flags) added |
|--------|---|---------------------------------------|
| () | Data are UNACCEPTABLE according to EPA Functional Gu | iidelines. |
| (X) | Data are acceptable with QUALIFICATIONS noted in review | |
| Teleph | none/Communication Logs Enclosed? Yes | No X |
| CLP P | roject Officer Attention Required? Yes No X | If yes, list the items that require |

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified representing all data packages received for this review. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, TDF No. DG-216, consisted of 54 total surface water and mine discharge and 4 dissolved mine discharge samples for Total Recoverable Metals and Dissolved Metals by Methods 200.7 ICP and 200.8 by ICPMS. The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

| Station ID | Client ID | Lab ID | Analyte | Result ug/L | EPA Qualifier | DSA Qualifier |
|------------|-----------|------------|------------|-------------|------------------|------------------|
| A68 | UASW003 | C101101-01 | Silver | 0.843 | U | UCB.6 |
| A68 | UASW003 | C101101-01 | Molybdenum | 3.63 | U | UCB1.35 |
| CC01S | UASW024 | C101101-04 | Beryllium | 0.968 | J+ | JC110.3 |
| CC02D | UAAD004 | C101101-07 | Molybdenum | 1.99 | U | UCB1.25 |
| CC02D | UAAD004 | C101101-08 | Beryllium | 4.82 | J+ | JC110.3 |
| CC03C | UAAD003 | C101101-09 | Molybdenum | 1.54 | U | UCB2.5 |
| CC03C | UAAD003 | C101101-10 | Beryllium | 8.40 | J+ | JC110.3 |
| CC03D | UASW015 | C101101-11 | Beryllium | 6.95 | J+ | JC110.3 |
| CC06 | UAAD002 | C101101-13 | Beryllium | 7.03 | J+ | JC110.3 |
| CC17 | UASW005 | C101101-14 | Molybdenum | 0.535 | υ | UCB1.35 |
| CC18 | UASW007 | C101101-16 | Beryllium | 3.54 | J+ | JC110.3 |
| CC19 | UAAD001 | C101101-18 | Beryllium | 4.18 | J+ | JC110.3 |
| CC48 DUP | UASW097 | C101101-20 | Beryllium | 1.30 | J+ | JC110.3 |
| UASW001 | UASW001 | C101101-23 | Beryllium | 1.17 | J+ | JC110.3 |
| UASW002 | UASW002 | C101101-24 | Silver | 0.953 | U | UCB.6 |
| UASW002 | UASW002 | C101101-24 | Molybdenum | 1.04 | U | UCB1.35 |
| UASW034 | UASW034 | C101101-41 | Molybdenum | 0.670 | U | UCB1.35 |
| UASW036 | UASW036 | C101101-42 | Molybdenum | 0.900 | U | UCB1.35 |
| UASW036 | UASW036 | C101101-42 | Silver | 0.891 | U | UCB.6 |
| UASW037 | UASW037 | C101101-43 | Molybdenum | 0.557 | U | UCB1.35 |

Sample Tracking:

There are Deliverable Submission Forms, but no actual laboratory log-in forms. The integrity of the samples cannot be verified. There are no courier forms or tracking identifications. Sample authentication cannot be verified.

Note that the laboratory forms do not contain dates or times of analysis on the result forms nor on the QC and Calibration Forms. This is not uncommon for CLP-type forms, but it means that the raw data must be spot checked to verify the calibration associations. This was performed only for any outliers listed on the Calibration or QC forms.

No shipping or receiving problems were noted in the narrative. As the client was not notified of custody or integrity issues, no further action is taken.

Blanks:

There are results reported for many of the ICB and CCBs, but none are above the MDLs recorded on the result forms (the ICB/CCB forms only note the PQLs) with the exception of molybdenum reported at 0.25 ug/L for QC set 1011004 and 0.27 ug/l for QC 1011092, 093 and 094; silver at 0.15 ug/l for QC 1011004 and 0.12 ug/L for QC 1011092, 093 and 094 for ICPMS. The highest associated blank is applied to noted data. All ICPMS data are diluted 5 to 10 x for analysis and the Blank must also be multiplied by 5 or 10 in order to apply it to the client data. Data are qualified 'UCB#', where # is the applied blank value. The EPA Qualifier is 'U'.

The laboratory notes that molybdenum was detected in the prep blank at $< 2 \times PQL$. The RL for was raised from 0.20 ug/L to 0.40 ug/L. The client will need to determine if the elevated limits meet project criteria. The standard procedure for outlier blanks is to re-analyze the data with an acceptable blank.

Calibration:

One CCV was very slightly high for beryllium at 110.3%. This is noted for Sequence 1011097. The run logs had to be accessed as the Sequences are not noted on the Results forms which have on Batch numbers – and the Calibration forms do not have dates, times or Batch numbers. This is associated with Batch 1011092. Having a consistent association of samples to calibrations on the forms would be useful. Detected data for beryllium in batch 1011092 are qualified 'JC110.3' to indicate a slight high bias. The EPA qualifier is 'J'

Matrix Spike:

The sample results were > 4 x spike for outlier spikes for manganese, magnesium, zinc and calcium. Data are not qualified as the recovery is not statistically valid. The laboratory limits (65-125%) are wider than the CLP limits. The limits noted above are used for qualification. After consideration of the 4x recoveries, no data are qualified.

Detection Limits:

Note that the samples for ICPMS were diluted 5x to 10x. The analytes run by ICPMS were extremely high for lead, cadmium and sometimes copper. The review recommends using the ICP values that are in the raw data for these analytes, although the results were within an acceptable RPD. It is the lower values that are significantly different between the two types of analysis/instrumentation. The client will need to determine if the elevated limits meet project criteria.

| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|--|-----------|------------|--------------------------|-------------------|
| All detected data in QC set 1011092 | Beryllium | J+ | C110.3 | 5 |
| All detected data in QC set 1011004 | Silver | | None, non-detect | 7 · |



| Sample ID | Elements | Qualifiers | Reason for Qualification | Review Section |
|---|------------|------------|---------------------------------------|-------------------|
| All detected data in QC set 1011092, 093, 094 | Silver | ับ | CB.12 (multiplied by dilution factor) | 7 |
| All detected data in QC set 1011004 | Molybdenum | U | CB.25 (multiplied by dilution factor) | 7 |
| All detected data in QC set 1011092, 093, 094 | Molybdenum | U | CB.27 (multiplied by dilution factor) | 7 |

There are no rinse blanks, which is acceptable for dedicated sampling equipment.

Field duplicates were identified in the EDD and fully meet field RPD criteria of 20% RPD or \pm 1x CRQL for waters.:

UASW005 and 098 UASW035 and 097 UASW019 and 099

3.

1.

| DELIVERABLES |
|---|
| All deliverables were present as specified in the Statement of Work. YesNo_X |
| Comments: There are Deliverable Submission Forms, but no actual laboratory log-in forms. The integrity of the samples cannot be verified. There are no courier forms or tracking identifications. Sample authentication cannot be verified. Note that the laboratory forms do not contain dates or times of analysis on the result forms nor on the QC and Calibration Forms. This is not uncommon for CLP-type forms, but it means that the raw data must be spot checked to verify the calibration associations. This was performed only for any outliers listed on the Calibration or QC forms. |
| HOLDING TIMES AND PRESERVATION CRITERIA |
| All technical holding times and preservation criteria were met. Yes_X No |
| Comments: The samples were analyzed within specified holding times (180 days for metals and 28 days for mercury). No temperature reading for the cooler was recorded. Per the chain of custody, there were pre-printed fields that noted the sediment samples were (to be) preserved to 4 C and the waters to pH<2, but this cannot be verified as there are no log-in forms. |
| No shipping or receiving problems were noted in the narrative. As the client was not notified of custody or integrity issues, no further action is taken. |
| INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS |
| Initial instrument calibrations were performed according to SOW requirements. Yes X No |
| Comments: None |
| The instruments were calibrated daily and each time an analysis run was performed. Yes X No |
| Comments: None. |
| The instruments were calibrated using one blank and the appropriate number of standards. Yes X No |

None.

Comments:

5.

6.

| SAMPLE AN | ALYSIS RESULTS |
|---|--|
| Sample analyse Yes_X | es were entered correctly on Form Is. No |
| Comments: | Per the 10% raw data check. |
| INITIAL ANI | CONTINUING CALIBRATION VERIFICATION |
| The initial and SOW requirem Yes X | continuing calibration verification standards (ICV and CCV, respectively) met ents. No |
| Comments: N | |
| | verification results were within 90-110% recovery for metals, 85-115% for 0-120% for mercury. |
| Sequence 1011 Results forms v or Batch number samples to calil | One CCV was very slightly high for beryllium at 110.3%. This is noted for 097. The run logs had to be accessed as the Sequences are not noted on the which have on Batch numbers – and the Calibration forms do not have dates, times ers. This is associated with Batch 1011092. Having a consistent association of brations on the forms would be useful. Detected data for beryllium in batch talified 'JC110.3' to indicate a slight high bias. The EPA qualifier is 'J+'. |
| The continuing Yes X | calibration standards were run at 10% frequency or every two hours. No |
| Comments: | None. |
| CRQL CHEC | CK STANDARD |
| ICP Analysis: Severy 20 analyt not before ICV Yes_X_ | Standards (CRI) were analyzed at the beginning of each sample analysis run and ical samples, immediately preceding the interferences check sample analyses, but analysis. No NA |
| Comments: | None. |
| The CRI recove for required eler | eries were within 70-130% (50 – 150% for ICP: Sb, Pb, Tl; ICP/MS: Co, Mn, Zn) ments. No |
| Comments: | None. |



| 7. | BL_{λ} | \mathbf{A} | V | K | S |
|----|----------------|--------------|---|---|---|
| | | | | | |

| The initial and continuing calibration blanks (ICB and CCB, respectively) met SOW |
|---|
| requirements. Yes No_X_ |
| Comments: There are results reported for many of the ICB and CCBs, but none are above the MDLs recorded on the result forms (the ICB/CCB forms only note the PQLs) with the exception of molybdenum reported at 0.25 ug/L for QC set 1011004 and 0.27 ug/l for QC 1011092, 093 and 094; silver at 0.15 ug/l for QC 1011004 and 0.12 ug/L for QC 1011092, 093 and 094 for ICPMS. The highest associated blank is applied to noted data. All ICPMS data are diluted 5 to 10 x for analysis and the Blank must also be multiplied by 5 or 10 in order to apply it to the client data. Data are qualified 'UCB#', where # is the applied blank value. The EPA Qualifier is 'U'. |
| The continuing calibration blanks were run at 10% frequency. Yes_X No |
| Comments: None. |
| |
| A laboratory/preparation blank was run at the frequency of one per twenty samples, or per sample delivery group (whichever is more frequent), and for each matrix analyzed. Yes_XNo |
| Comments: None |
| All analyzed blanks were free of contamination. Yes NoX |
| Comments: The laboratory notes that molybdenum was detected in the prep blank at $< 2 \text{ x}$ PQL. The RL for was raised from 0.20 ug/L to 0.40 ug/L. It was also detected in the calibration blanks. The client will need to determine if the elevated limits meet project criteria. The standard procedure for outlier blanks is to re-analyze the data with an acceptable blank. See calibration blank section. |
| ICP INTERFERENCE CHECK SAMPLE |
| The ICP interference check sample (ICS) was run at the beginning of each sample analysis run, but not prior to the ICV. Yes X No |
| Comments: None. |
| Percent recovery of the analytes in the ICS solutions were within the range of 80-120% or the result was within ±2x the CRQL. Yes_XNo |
| Comments: None. |
| |

| | Sample results for aluminum, calcium, iron, and magnesium were less than the ICSA values. Yes X No No No No No No No No No No No No No |
|-----|--|
| | Comments: None |
| | No sample results contain potential false positives and false negatives. Yes X No No No No No No No No No No No No No |
| | Comments: None. |
| 9. | MATRIX SPIKE SAMPLE ANALYSIS |
| | A matrix spike sample was analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). Yes X No NA NA |
| | Comments: Frequency met with client samples. |
| | The percent recoveries (%Rs) were calculated correctly. Yes_X No NA |
| | Comments: None. |
| | Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration). Yes X No No No No No No No No No No No No No |
| | Comments: The sample results were > 4 x spike for outlier spikes for manganese, magnesium, zinc and calcium. Data are not qualified as the recovery is not statistically valid. The laboratory limits (65-125%) are wider than the CLP limits. The limits noted above are used for qualification. After consideration of the 4x recoveries, no data are qualified. |
| 10. | POST DIGEST SPIKE RECOVERY |
| | A post-digest spike was performed for those elements that did not meet the specified criteria (i.e., Pre-digestion/pre-distillation spike recovery falls outside of control limits and sample result is less than four times the spike amount added, exception: Silver, mercury). Yes X No NA NA |
| | Comments: See Section 9.0. |
| 11. | DUPLICATE SAMPLE ANALYSIS |
| | Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). Yes X No NA |

12.

| Comments: | Duplicates and MS Duplicates are reported. |
|-------------------------------|---|
| | re calculated correctly. |
| Yes_X | No NA |
| Comments: | None. |
| apply for soil/s | ncentrations greater than five times the CRQL, RPDs were < 20% (limits of <35% sediments/tailings samples). No NA |
| Comments: | None. |
| the control wir | ncentrations less than five times the CRQL, duplicate analysis results were within adow of < CRQL (two times CRQL for soils). No NA |
| Comments: | None. |
| ICP-MS | |
| The ICP MS to Yes X | ne met SOW requirements. No NA |
| were met. The were reported a | the ICP MS instrument was correctly tuned prior to analysis and all tuning criteria $\%$ RSDs were within the 5% limits for the tune. The Ba/Ba++ and Ce/CeO ratios and within limits. The amu (atomic mass units) at half peak width were within large of $0.7-0.8$). |
| The minimum analyte masses | number of internal standards were added to the analyses and bracketed the target |
| Yes_X_ | No |
| Comments: | None. |
| All percent rela | ntive intensities were within 60-125%. No |
| Comments: | Per the 10% check of project data. |



13. LABORATORY CONTROL SAMPLE

| | samples of a similar matrix, or one per sample delivery group (whichever is more frequent). Yes X No |
|-----|--|
| | All results were within control limits. Yes_X No |
| | Comments: None |
| 14. | ICP-SERIAL DILUTION QC |
| | A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent. Yes X No No No No No No No No No No No No No |
| | Comments: None. |
| | The serial dilution was without interference problems as defined by the SOW or NFG. Yes X No |
| | Comments: The serial dilution %Ds were less than 10% or the original sample result was less than 50> the RL. |
| 15. | ANNUAL METHOD DETECTION LIMITS (MDL) |
| | MDLs were provided for all elements on the target analyte list. YesX No |
| | Comments: Last updated February 2010 |
| | Reported MDLs met SOW requirements. YesX No |
| | Comments: Note that the samples for ICPMS were diluted 5x to 10x. The analytes run by ICPMS were extremely high for lead, cadmium and sometimes copper. The review recommends using the ICP values that are in the raw data for these analytes, although the results were within an acceptable RPD. It is the lower values that are significantly different between the two types of analysis/instrumentation. The client will need to determine if the elevated limits meet project |

criteria.

| Yes | corrections for ICP were reported. No_X_ |
|------------------------|--|
| Comments: | Interelement corrections were not included. No action was required. |
| ICP LINEA | R RANGES |
| ICP linear ran | ges were reported. |
| YesX | No |
| Comments: | The linear ranges were updated in February 2010. |
| PREPARAT | TION LOG |
| Information of the rav | n the preparation of samples for analysis was reported on laboratory bench sheets as a data deliverable. |
| YesX | No |
| Comments: | None. |
| ANALYSIS I | RUN LOG |
| A Form with Yes X | the required information was filled out for each analysis run in the data package. No |
| Comments: | None. |
| | omments or Problems/Resolutions Not Addressed Above |
| Yes_X_ | No |
| Comment: | |
| rield duplicate | inse blanks, which would be appropriate if dedicated equipment was used. Es were identified in the EDD and fully meet field RPD criteria of 20% RPD or \pm 1 |
| KCRQL for w | aters.: |
| UASW005 and | |
| JASW035 and | |
| JASW019 and | 1 099 |



Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
- J+ The associated numerical value is an estimated quantity but the result may be biased high.
- J- The associated numerical value is an estimated quantity but the result may be biased low.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.



ACRONYMS

CCB Continuing Calibration Blank

CCV Continuing Calibration Verification

CFR Code of Federal Regulations CLP Contract Laboratory Program

CROL Contract Required Quantitation Limit

CRI CRQL standard required for ICP

CVCold Vapor

EPA U.S. Environmental Protection Agency

ICB Initial Calibration Blank **ICP** Inductively Coupled Plasma **ICS** Interference Check Sample

ICSA Interference Check Sample (Solution A) **ICSAB** Interference Check Sample (Solution AB)

ICV Initial Calibration Verification LCS Laboratory Control Sample **MDL** Method Detection Limit

MS Matrix Spike MSD MS Duplicate

NFG EPA CLP National Functional Guidelines for Inorganic Data Review

PDS Post Digestion Spike

OC **Quality Control**

RPD Relative Percent Difference **RPM** Regional Project Manager

RSD Percent Relative Standard Deviation

SA Spike Added

SAS Special Analytical Services SDG Sample Delivery Group SOW Statement of Work

SR

Sample Result

SSR Spiked Sample Result TDF #:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: A68 Date / Time Sampled: 10/26/10 00:00 Workorder: C101101
EPA Tag No.: No Tag Prefix-3 Matrix: Surface Water Lab Number: C101101-01 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 86.2 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 54300 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 3290 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 1940 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 614 | J | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 2460 | • | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 449 | | ug/L | 10.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | . 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 1.82 | | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Lead | 0.790 | J, | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | 3.63 | | ug/L | 0.500 L | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | 0.843 | J | ug/L | 0.500 W | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | 15.4 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | . 5 | 11/18/2010 | sv | 1011092 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

| Station ID: EPA Tag No.: | A72 No Tag Prefix-12 | Date / Time Sampled: 10/25/10 00:00 Matrix: Surface Water | Workorder: Lab Number: | C101101 | A | • |
|-----------------------------|-------------------------|--|---------------------------|------------|---|---|
| | | | Day 1 (diffect | C101101-02 | А | • |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 1300 | | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 87500 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 8140 | • | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 7330 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 796 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | · 1620 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 5580 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 94.6 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 5.00 | Ū | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Arsenic | < 10.0 | Ū | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cadmium | 0.653 | J | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Chromium | < 5.00 | U. | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cobalt | 3.84 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 8.74 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 8.00 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 8.00 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 8.00 | Thallium | < 5.00 | υ | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 8.00 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/18/2010 | sv | 1011092 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC01F EPA Tag No.: No Tag Prefix-55 Date / Time Sampled: 10/31/10 13:00 Matrix: Surface Water

Workorder: C101101

Lab Number: C101101-03 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|-----|---------|
| 200.7 | Aluminum | 69.0 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 46200 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 4060 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 120 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 294 | J | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 1230 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 556 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 5.00 | Ū | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | 30.8 | J | ug/L | 25.0 | . 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | < 1.00 | υ | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 3.09 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 25.2 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 0.620 | J | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | < 5.00 | U | ug/L | 2.50 | . 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Selenium | < 5.00 | U . | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 10.0 | Ū | ug/L | 5.00 | 5 | 11/18/2010 | SV. | 1011092 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC01S EPA Tag No.: No Tag Prefix-54 Date / Time Sampled: Matrix: Surface Water

10/31/10 12:04

Workorder:

C101101

Certificate of Analysis

Lab Number: C101101-04

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|----------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 2180 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 72700 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Magnesium | 9760 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Manganese | 977 | | ug/L | 2.00 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Potassium | 561 | J | ug/L | 250 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Sodium | 1340 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zine | 3230 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | Ū | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | 34.7 | J | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 0.968 | J | ug/L | 0.500 3+ | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 16.9 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 38.6 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 2.21 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1,00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | 12.1 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 . | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 . | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 10.0 | U , | ug/L | 5.00 | 5 | 11/18/2010 | SV | 1011092 |

Project Name: Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC01T **Date / Time Sampled:** 10/31/10 11:50 Workorder: C101101 Matrix: Surface Water Lab Number: C101101-05 A EPA Tag No.: No Tag Prefix-53

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------|---------|
| 200.7 | Aluminum | 1580 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 55400 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 7020 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 633 | | ug/L | 2.00 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Potassium | 482 | J | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 1280 | | ug/L | 250 | 1 | 11/18/2010 | . SW | 1011092 |
| 200.7 | Zînc | 2750 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | 29.1 | J | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | . 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cadmium | 13.6 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | · 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 102 | | ug/L | 2.50 | 5 | 11/18/2010 | ŚV | 1011092 |
| 200.8 | Lead | 2.03 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | · U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Nickel | 6.06 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | ·Ū | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 5.00 | · U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/18/2010 | sv | 1011092 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC02A EPA Tag No.: No Tag Prefix-52

Date / Time Sampled: 10/31/10 11:19 Matrix: Surface Water

Workorder:

C101101

Lab Number: C101101-06

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution - Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|----------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 1430 | | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 62000 | | ug/L | 100 | I | 11/18/2010 | \mathbf{sw} | 1011092 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Magnesium | 8310 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Manganese | 111 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 634 | J | ug/L | 250 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Sodium | 1260 | | ug/L | 250 | 1 . | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 3080 | | ug/L | 10.0 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | 39.4 | J | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 10.9 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 22.3 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 2.54 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 8.00 | Nickel | 9.47 | | ug/L | 2.50 | 5 . | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 2.50 | Ü | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 8.00 | Thallium | < 5.00 | U . | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 8.00 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/18/2010 | sv | 1011092 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: CC02D

EPA Tag No.: No Tag Prefix-38

Date / Time Sampled: Matrix: Mine Discharge

10/29/10 15:00

Workorder: Lab Number:

C101101

C101101-07

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|--------|---------|--------------------|------------|------|---------|
| 200.7 | Aluminum | 3300 | - | ug/L | 20.0 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Calcium | 211000 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Iron | 27200 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Magnesium | 13200 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Manganese | 29100 | | ug/L | 2.00 | 1 | 11/23/2010 | SW · | 1011103 |
| 200.7 | Potassium | 2000 | | ug/L | 250 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Sodium | 6210 | 4 | ug/L | 250 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Zinc | 32700 | | ug/L | 10.0 | 1 | 11/23/2010 | SW | 1011103 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Arsenic | 2.72 | J | ug/L | 2.50 | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 . | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Beryllium | 4.49 | | ug/L | 0.500 | 5 | 11/23/2010 | SV | 1011104 |
| 200.8 | Cadmium | 50.9 | | ug/L | 0.500 | 5 | 11/23/2010 | SV | 1011104 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/23/2010 | SV | 1011104 |
| 200.8 | Cobalt | 22.5 | | ug/L | 0.500 | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Copper | 20.9 | | ug/L | 2.50 | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Lead | 255 | | ug/L | 0.500 | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Molybdenum | 1.99 | J | ug/L | 0.500 W | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Nickel | 8.30 | | ug/L | 2.50 | 5 | 11/23/2010 | SV | 1011104 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/23/2010 | SV | 1011104 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/23/2010 | SV | 1011104 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/23/2010 | sv | 1011104 |
| 200.8 | Vanadium | < 10.0 | U | ug/L ຸ | 5,00 | 5 | 11/23/2010 | SV | 1011104 |
| 2340B | Hardness | 582 | | mg/L | 2 | 1 | 11/23/2010 | sw | 1011103 |

TDF#:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC02D EPA Tag No.: No Tag Prefix-42 Date / Time Sampled: 10/29/10 15:00

Matrix: Mine Discharge

Workorder:

C101101

Lab Number: C101101-08 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|---------------|---------|
| 200.7 | Aluminum | 3330 | | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 212000 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Iron | 31900 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 13200 | | ug/L | 100 | 1 | 11/18/2010 | \mathbf{sw} | 1011092 |
| 200.7 | Manganese | 28700 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 2040 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 6280 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 31300 | | ug/L | 10.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | < 100 | U- | ug/L | 50.0 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 4.82 | | ug/L | 1.00 5* | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 55.0 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 22.3 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 15.3 | | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Lead | 271 | • | ug/L | 1.00 - | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 2.00 | ·U | ug/L | 1.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Nickel | 6.74 | 1 | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 10.0 | Ŭ | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 5.00 | Ŭ . | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/18/2010 | SV | 1011092 |

TDF #:

DG-216

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: CC03C

EPA Tag No.: No Tag Prefix-37

Date / Time Sampled: 10/28/10 10:30 Matrix: Mine Discharge

Workorder:

Certificate of Analysis

Lab Number: C101101-0

| 09 | P |
|----|---|
| | |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|------------|-------|--------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 4620 | | ug/L | 20.0 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Calcium | 442000 | | ug/L | 100 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Iron | 101000 | • | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Magnesium | 28600 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Manganese | 30500 | | ug/L | 2.00 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Potassium | 1840 | | ug/L | 250 | Ĭ | 11/23/2010 | SW | 1011103 |
| 200.7 | Sodium | 8530 | | ug/L | . 250 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Zinc | 15400 | | ug/L | 10.0 | 1 | 11/23/2010 | sw | 1011103 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Barium | < 100 | U , | ug/L | 50.0 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Beryllium | 6.45 | | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Cadmium | 48.7 | | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Cobalt | 102 | | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Copper | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Lead | 98.7 | | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Molybdenum | 1.54 | J | ug/L | 1.00 W | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Nickel | 42.6 | | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Selenium | < 10.0 | Ŭ | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Thallium | < 10.0 | Ŭ | ug/L | 5.00 | 10 | 11/23/2010 | SV | 1011104 |
| 8.00 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/23/2010 | sv | 1011104 |
| 2340B | Hardness | 1220 | | mg/L | 2 | 1 | 11/23/2010 | sw | 1011103 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC03C EPA Tag No.: No Tag Prefix-41

Date / Time Sampled: 10/28/10 10:30 Matrix: Mine Discharge

Workorder:

Lab Number:

C101101-10 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 4680 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 441000 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 102000 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 28700 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 30700 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 1860 | | ug/L | 250 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Sodium | 8730 | | ug/L | 250 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Zinc | 15500 | | ug/L | 10.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | 8.40 | | ug/L | 1.00 57 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cadmium | 53.1 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 97.4 | | ug/L | 1.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Copper | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 107 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | 38.2 | | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 5.00 | . U | ug/L | 1.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/18/2010 | SV | 1011092 |

TDF #:

Metals (Total Recov) by EPA 200/7000 Series Methods

| Station ID: CC03D | D | ate / Time Sampled: | 10/28/10 10:00 | Workorder: C | 101101 |
|-----------------------------|-------|-----------------------|----------------|--------------|---|
| EPA Tag No.: No Tag Prefix- | -46 N | fatrix: Surface Water | | Lab Number: | C101101-11 A |
| | | | | | - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|--------|---------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 3040 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 450000 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Iron | 95200 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 28900 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 31900 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 1850 | | ug/L | 250 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Sodium | 8800 | | ug/L | 250 | 1 | 11/18/2010 | SŴ | 1011092 |
| 200.7 | Zinc | 15500 | • | ug/L | 10.0 | . 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | 6.95 | | ug/L | 1.00 5+ | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cadmium | 42.2 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 10.0 | Ū | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 95.9 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Lead | 13.1 | , | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 2.00 | U | · ug/L | 1.00 | 1,0 | 11/18/2010 | SV | 1011092 |
| 200.8 | Nickel | 38.6 | | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Sîlver | < 5.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 20.0 | · U | ug/L | 10.0 | 10 | 11/18/2010 | SV | 1011092 |

TDF #:

DG-216

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: CC06 Date / Time Sampled: 10/28/10 13:39 Workorder: C101101
EPA Tag No.: No Tag Prefix-36 Matrix: Mine Discharge Lab Number: C101101-12 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|------|--------------------|------------|-----|---------|
| 200.7 | Aluminum | 18300 | | ug/L | 20.0 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Calcium | 395000 | | ug/L | 100 | · 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Iron | 71600 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Magnesium | 22600 | | ug/L | 100 | . 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Manganese | 27800 | | ug/L | 2.00 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Potassium | 1790 | | ug/L | 250 | . 1 | 11/23/2010 | ·sw | 1011103 |
| 200.7 | Sodium | 5260 | | ug/L | 250 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Zinc | 18600 | | ug/L | 10.0 | 1 | 11/23/2010 | sw | 1011103 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Barium | < 100 | υ | ug/L | 50.0 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Beryllium | 5.98 | | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Cadmium | 53.0 | • | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Cobalt | 84.4 | | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Copper | 4210 | | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Lead | 5.66 | 4 | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Molybdenum | < 4.00 | J, | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Nickel | 35.4 | | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Vanadium | < 20.0 | U . | ug/L | 10.0 | 10 | 11/23/2010 | sv | 1011104 |
| 2340B | Hardness | 1080 | | mg/L | 2 | . 1 | 11/23/2010 | sw | 1011103 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC06

EPA Tag No.: No Tag Prefix-40

Date / Time Sampled: 10/28/10 13:39 Matrix: Mine Discharge

Workorder: C101101

Lab Number:

C101101-13

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|---------------|---------|
| 200.7 | Aluminum | 18500 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 398000 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 73700 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Magnesium | 22800 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 28000 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 1810 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 5350 | | ug/L | 250 | 1 | 11/18/2010 | \mathbf{sw} | 1011092 |
| 200.7 | Zinc | 18700 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | . 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 7.03 | | ug/L | 1.00 ゴナ | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 54.9 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 79.1 | | ug/L | 1.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Copper | 4030 | | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Lead | 6.82 | • | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | SV - | 1011092 |
| 200.8 | Nickel | 31.2 | | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/18/2010 | SV | 1011092 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/27/10 00:00 Workorder: C101101 Station ID: CC17 Lab Number: C101101-14 A Matrix: Surface Water EPA Tag No.: No Tag Prefix-5

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 720 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 162000 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 3230 | | ug/L | 100 | I | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 8230 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 1840 | • | ug/L | 2.00 | 1 - | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Potassium | 747 | J | ug/L | 250 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Sodium | 3470 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 647 | | ug/L | 10.0 | . 1 | 11/18/2010 | \mathbf{sw} | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | · 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | . 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | \mathbf{SV} | 1011092 |
| 200.8 | Cadmium | 2,73 | | ug/L | 0.500 | . 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 7.71 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 8.83 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 0.643 | J | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | 0.535 | J | ug/L | 0.500 U | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 2.50 | U· | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | ' 5 | 11/18/2010 | \mathbf{SV} | 1011092 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC17 DUP

EPA Tag No.: No Tag Prefix-34

Date / Time Sampled: 10/27/10 00:00

Matrix: Surface Water

Lab Number: C101101-15 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 572 | • | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 163000 | | ug/L | 100 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Iron | 3090 | | ug/L | 100 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Magnesium | 8340 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 1860 | | ug/L | 2.00 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Potassium | 752 | 1 · | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 3520 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 661 | | ug/L | 10.0 | 1 | 11/18/2010 | SW. | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 2.41 | | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV . | 1011092 |
| 200.8 | Cobalt | 7.36 | • | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 6.50 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 . | 11/18/2010 | SV | 1011092 |
| 200.8 | Nickel | < 5.00 | Ŭ. | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | < 5.00 | υ | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/18/2010 | SV | 1011092 |
| | | | • | | | | | | |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/27/10 00:00 Station ID: CC18 EPA Tag No.: No Tag Prefix-7 Matrix: Surface Water

Workorder:

Lab Number:

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|------------|-------|----------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 5730 | | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 450000 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 131000 | | ug/L | 100 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Magnesium | 31400 | | ug/L | 100 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Manganese | 43000 | | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 1740 | , | ug/L | 250 | I | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Sodium | 9500 | | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 18800 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 10.0 | ŭ | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 3.54 | | ug/L | 1.00 🖯 🕇 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 2.54 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cobalt | 136 | • | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 1.52 | J | ug/L | 1.00 | . 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | 46.9 | | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 20.0 | . U | ug/L | 10.0 | 10 | 11/18/2010 | sv | 1011092 |

TDF #:

DG-216

Certificate of Analysis

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: CC19

EPA Tag No.: No Tag Prefix-35

Date / Time Sampled: 10/27/10 10:05 Matrix: Mine Discharge

Workorder:

C101101

Lab Number:

C101101-17

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 4990 | · | ug/L | 20.0 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Calcium | 434000 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Iron | 133000 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Magnesium | 29900 | | ug/L | 100 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Manganese | 41700 | | ug/L | 2.00 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Potassium | 1680 | | ug/L | 250 | 1 | 11/23/2010 | sw | 1011103 |
| 200.7 | Sodium | 9080 | | ug/L | 250 | 1 | 11/23/2010 | SW | 1011103 |
| 200.7 | Zinc | 18100 | | ug/L | 10.0 | 1 | 11/23/2010 | SW | 1011103 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Barium : | < 100 | U | ug/L | 50.0 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Beryllium | 3.70 | | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Cadmium | 2.02 | | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Cobalt | 136 | | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Copper | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Lead | 1.12 | J . | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Molybdenum | < 4.00 | J, | ug/L | 1.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Nickel | 47.8 | | ug/L | 5.00 | 10 | 11/23/2010 | SV | 1011104 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/23/2010 | sv | 1011104 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/23/2010 | sv | 1011104 |
| 2340B | Hardness | 1210 | | mg/L | 2 | 1 | 11/23/2010 | SW | 1011103 |

[&]quot;J" Qualifier indicates an estimated value

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC19

EPA Tag No.: No Tag Prefix-39

Date / Time Sampled: 10/27/10 10:05 Matrix: Mine Discharge

Workorder:

C101101

Lab Number: C101101-18

| Α | |
|---|--|
| | |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 5520 | - | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 457000 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 144000 | - | ug/L | 100 | . 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 31600 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Manganese | 44000 | | ug/L | 2.00 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Potassium | 1790 | - | ug/L | 250 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Sodium | 9610 | | ug/L | 250 | 1 . | 11/18/2010 | SW | 1011092 |
| 200.7 | Zinc | 19100 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 4.18 | • | ug/L | 1.00 J+ | 10 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cadmium | 1.97 | J · | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| . 8.00 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 . | 11/18/2010 | sv | 1011092 |
| 8.00 | Cobalt | 133 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Copper | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Lead | 3.70 | | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| . 8.00 | Molybdenum | < 2.00 | U | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Nickel | 46.3 | | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Selenium | < 10.0 | U, | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 00.8 | Silver | < 5.00 | U · | ug/L | 1.00 | 10 | 11/18/2010 | sv | 1011092 |
| 8.00 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/18/2010 | sv | 1011092 |
| 00.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/18/2010 | sv | 1011092 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/26/10 00:00 Workorder: C101101 Station ID: CC48 Lab Number: C101101-19 A Matrix: Surface Water EPA Tag No.: No Tag Prefix-16

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 7890 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 177900 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 12000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Magnesium | 10900 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 4580 | | ug/L | 2.00 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Potassium | 1840 | | ug/L | 250 | . 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 4550 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 2340 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Barium | < 50.0 | υ | ug/L | 25.0 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Beryllium | 1.14 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cadmium | 6.57 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cobalt | 22.3 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 147 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 17.4 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 11.0 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | υ | ug/L | 2.50 | - 5 | 11/22/2010 | ŠV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 . | 11/22/2010 | SV | 1011093 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: CC48 DUP

April 1 July 1888 EPA Tag No.: No Tag Prefix-33

Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water

Workorder:

C101101

Lab Number:

C101101-20

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution | Analyzed | By | Batch |
|--------|------------|---------|-----------|-------|----------|----------|------------|----|---------|
| | | | Anamitei | | | Factor | - | | |
| 200.7 | Aluminum | 7870 | | ug/L | 20.0 | . 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 175000 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Iron | 11700 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Magnesium | 10900 | | ug/L | 100 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Manganese | 4810 | | ug/L | 2.00 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Potassium | 1800 | | ug/L | 250 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Sodium | 4580 | | ug/L | 250 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Zinc | 2500 | | ug/L | 10.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 1.30 | | ug/L | 0.500 ゴナ | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 6.45 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cobalt | 21.6 | | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Copper | 135 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 19.0 | | ug/L | 0.500 | 5 . | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Nickel | 9.52 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | υ | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/18/2010 | SV | 1011092 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/28/10 10:59 Workorder: C101101 Station ID: CCOPP-12 Lab Number: C101101-21 EPA Tag No.: No Tag Prefix-47 Matrix: Surface Water

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 2480 | | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 87800 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 210 | J | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 6010 | • | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 3000 | | ug/L | 2.00 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Potassium | 532 | J | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 2890 | | ug/L | 250 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Zinc | 4640 | | ug/L | 10.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cadmium | 13.7 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cobalt | 1.83 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 140 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 7.42 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | · · u | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | 3.23 | J | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Thallium | < 5.00 | U · | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/18/2010 | sv | 1011092 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: M34

EPA Tag No.: No Tag Prefix-14

Date / Time Sampled: 10/25/10 00:00 Matrix: Surface Water

Workorder:

C101101

Lab Number: C101101-22 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 381 | | ug/L | 20.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Calcium | 57500 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Iron | 2800 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium | 4860 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Manganese | 327 | e e | ug/L | 2.00 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Potassium | 629 | J | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Sodium | 3300 | | ug/L | 250 | 1 | 11/18/2010 | $\mathbf{s}\mathbf{w}$ | 1011092 |
| 200.7 | Zinc | 185 | 4 | ug/L | 10.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Barium | < 50.0 | บ | ug/L | 25.0 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Beryllium | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 0.926 | 1 | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 3.75 | | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Copper | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Lead | 1,23 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Nickel | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Selenium . | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 5.00 | Ú | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Vanadium | < 10.0 | Ü | ug/L | 5.00 | . 5 | 11/18/2010 | sv | 1011092 |

Project Name:

Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW001 Date / Time Sampled: 10/26/10 00:00 Workorder: C101101 EPA Tag No.: No Tag Prefix-1 Matrix: Surface Water Lab Number: C101101-23 A

| Method | Parameter | Results | Qualifier | Units | - MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|-------------|---------|-----------|-------|----------|--------------------|------------|------|---------|
| 200.7 | Aluminum | 7330 | | ug/L | 20.0 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Calcium | 169000 | | ug/L | 100 | -1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Iron | 10800 | | ug/L | 100 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Magnesium . | 10400 | | ug/L | 100 | 1 | 11/18/2010 | ·sw | 1011092 |
| 200.7 | Manganese | 4760 | | ug/L | 2.00 | 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Potassium | 1700 | | ug/L | 250 | - 1 | 11/18/2010 | SW | 1011092 |
| 200.7 | Sodium | 4450 | - | ug/L | 250 | 1 | 11/18/2010 | sw | 1011092 |
| 200.7 | Zinc | 2410 | ٠ | ug/L | 10.0 | 1 | 11/18/2010 | SW | 1011092 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Beryllium | 1.17 | | ug/L | 0.500 Ft | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Cadmium | 6.19 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Cobalt | 20.4 | | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Copper | 121 | | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Lead | 17.8 | • | ug/L | 0.500 | . 5 | 11/18/2010 | `sv- | 1011092 |
| 200.8 | Molybdenum | < 1.00 | . U | ug/L | 0.500 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Nickel | 8.46 | | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/18/2010 | sv | 1011092 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/18/2010 | SV | 1011092 |
| 200.8 | Vanadium | < 10.0 | υ | ug/L | 5.00 | 5 | 11/18/2010 | SV | 1011092 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW002 EPA Tag No.: No Tag Prefix-2

Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water

Workorder:

Lab Number: C101101-24

| A |
|---|
| |

| 2222 248 2400 | 110 115 110121 2 | | | | | | | | | |
|---------------|------------------|---------|-----------|----------|-------|--------------------|------------|------------------------|---------|--|
| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch | |
| 200.7 | Aluminum | 7810 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 | |
| 200.7 | Calcium | 175000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 | |
| 200.7 | Iron | 11500 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 | |
| 200.7 | Magnesium | 10900 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 | |
| 200.7 | Manganese | 4650 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 | |
| 200.7 | Potassium | 1790 | ÷ | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 | |
| 200.7 | Sodium | 4540 | | ug/L | 250 | . 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 | |
| 200.7 | Zinc | 2370 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 | |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Beryllium | 0.826 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Cadmium | 6.55 | | ug/L | 0.500 | 5 | 11/22/2010 | SV · | 1011093 | |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011093 | |
| 200.8 | Cobalt | 23.7 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Copper | 148 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Lead | 17.8 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Molybdenum | 1.04 | J | ug/L ∪ | 0.500 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Nickel | 10.6 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 | |
| 200.8 | Silver | 0.953 | 1 | . ug/L 🔑 | 0.500 | 5 | 11/22/2010 | sv | 1011093 | |
| 200.8 | Thallium | 5.61 | • | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 | |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011093 | |
| | | | | | | | | | | |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW004 Date / Time Sampled: 10/27/10 00:00 Workorder: C101101
EPA Tag No.: No Tag Prefix-4 Matrix: Surface Water Lab Number: C101101-25 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|---------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 5130 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 202000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 16200 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 13100 | | ug/L | 100 | 1 | 11/22/2010 | SŴ | 1011093 |
| 200.7 | Manganese | 10100 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 933 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 4480 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 5510 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 2.28 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 16.1 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobalt | 33.0 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Copper | 398 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 25.0 | • | ug/L | . 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Molybdenum | < 1.00 | · U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 14.7 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Silver | < 2.50 | Ū | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |

Project Name: Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW006 **Date / Time Sampled:** 10/27/10 00:00 Workorder: Matrix: Surface Water C101101-26 EPA Tag No.: No Tag Prefix-6 Lab Number:

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|--------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 9160 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 258000 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Iron | 32500 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Magnesium | 18200 | | · ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 18500 | | ug/L | 2.00 | . 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 987 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 5630 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 10700 | | ug/L | 10.0 | . 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 3.61 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 30.3 | | ug/L | 0.500 | 5 . | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | Ū | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobalt | 59.4 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Copper | 796 | | ug/L | 2.50 | - 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 44.8 | • | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 24.8 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011093 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW008 EPA Tag No.: No Tag Prefix-8

Date / Time Sampled: 10/27/10 00:00 Matrix: Surface Water

Workorder:

C101101

Lab Number:

| 200.7 | | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|-------|------------|---------|-----------|-------|-------|--------------------|------------|------|---------|
| | Aluminum | 7940 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 238000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 30000 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 16100 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 14800 | • | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Potassium | 926 | ı | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 5100 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 9230 | | ug/L | 10.0 | 1 | 11/22/2010 | SW . | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | ·U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 2.88 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 28.7 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobalt | 46.6 | | ug/L | 0.500 | 5 - | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 884 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 19.3 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 20.8 | | ug/L | 2.50 | · 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | , U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW009

EPA Tag No.: No Tag Prefix-9

Date / Time Sampled: 10/27/10 00:00 Matrix: Surface Water

Workorder:

Lab Number:

C101101-28

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 7030 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 230000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 31400 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 15600 | | ug/L | 100 | Ī | 11/22/2010 | SW | 1011093 |
| 200.7 | Manganese | 14800 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 899 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 4820 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 9350 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 3.57 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 29.1 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobalt | 49.2 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| . 8.00 | Copper | 909 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 14.6 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 8.00 | Molybdenum | < 1.00 | Ŭ | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 8.00 | Nickel | 328 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 8.00 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 8.00 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 00.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 8.00 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/27/10 00:00 C101101 Workorder: Station ID: UASW010 Lab Number: C101101-29 A EPA Tag No.: No Tag Prefix-10 Matrix: Surface Water

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 23500 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 348000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 52900 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 24800 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Manganese | 23700 | | ug/L | 2.00 | . 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Potassium | 1430 | | ug/L | 250 | 1 | 11/22/2010 | SW: | 1011093 |
| 200.7 | Sodium | 5140 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 16200 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 6.34 | _ | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 63.7 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 10.0 | . U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobalt | 83.1 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 4230 | | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 5.93 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 2.00 | Ŭ | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 39.3 | | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Vanadium | < 20.0 | Ú | ug/L | 10.0 | 10 | 11/22/2010 | SV | 1011093 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW011 Date / Time Sampled: 10/28/10 14:10 Workorder: EPA Tag No.: No Tag Prefix-43 Matrix: Surface Water Lab Number: C101101-30 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|------|--------------------|------------|------|---------|
| 200.7 | Aluminum | 18100 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 388000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 66700 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Magnesium | 22300 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 26000 | | ug/L | 2.00 | ī | 11/22/2010 | SW | 1011093 |
| 200.7 | Potassium | 1790 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Sodium | 5240 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 17100 | | ug/L | 10.0 | 1 | 11/22/2010 | SW - | 1011093 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011093 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 7.06 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 53.3 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | SV - | 1011093 |
| 200.8 | Cobalt | 81.4 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 4580 | | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011093 |
| 200.8 | Lead | 5.66 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | 10 | 11/22/2010 | sv · | 1011093 |
| 8.00 | Nickei | 35.8 | | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 8.00 | Selenium | < 10.0 | U . | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011093 |
| 8.00 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011093 |
| 8.00 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 11/22/2010 | sv | 1011093 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW012 EPA Tag No.: No Tag Prefix-44

Date / Time Sampled: 10/28/10 14:25 Matrix: Surface Water

Workorder:

C101101

Lab Number: C101101-31

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 3820 | | ug/L | 20.0 | . 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 52500 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Iron | < 250 | Ü | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 7230 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Manganese | 742 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 545 | J | ug/L | 250 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Sodium | 2040 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Zinc | 924 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Barium | < 50.0 | ប | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 0.595 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 4.69 | | ug/L | 0.500 | 5 . | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | 2.56 | J | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cobalt | 7.94 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 291 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 4.50 | | uģ/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 5.44 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | . 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | . 5 | 11/22/2010 | sv | 1011093 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW013 EPA Tag No.: No Tag Prefix-11

Date / Time Sampled: Matrix: Surface Water

10/27/10 00:00

Workorder:

C101101

Lab Number: C101101-32 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 3550 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Całcium | 210000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 27700 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Magnesium | 14000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 12800 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 874 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 4980 | ÷ | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 7890 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | . 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Beryllium | 2.73 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cadmium | 22.0 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Chromium | < 5.00 | · U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cobalt | 36.3 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 128 | • | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 13.3 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 16.3 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | Ū | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 8.00 | Vanadium | < 10.0 | . U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |
| | | | | | | | | | |

Project Name:

Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW014 Date / Time Sampled: 10/28/10 09:45

EPA Tag No.: No Tag Prefix-45 Matrix: Surface Water

Workorder: C101101 Lab Number: C101101-33 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|--------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 4980 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Calcium | 231000 | • | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Iron | 30600 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 15700 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{S}\mathbf{W}$ | 1011093 |
| 200.7 | Manganese | 14900 | | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Potassium | 920 | J | ug/L | 250 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Sodium | 5430 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Zinc | 8770 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | · ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 3.03 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 25.8 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 . | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobait | 46.0 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 121 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 16.1 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 20.2 | | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 · | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |
| | | | | • | | | | | |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW017

EPA Tag No.: No Tag Prefix-48

Date / Time Sampled: 10/29/10 11:55 Matrix: Surface Water

Workorder:

Lab Number:

C101101-34 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 2570 | | ug/L | 20.0 | . 1 | 11/22/2010 | SW. | 1011093 |
| 200.7 | Calcium | 81400 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 186 | J | ug/L | 100 | , 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Magnesium | 6280 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 3370 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 568 | J | ug/L | 250 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Sodium | 2610 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 4910 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | · U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Beryllium | 1.08 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cadmium | 15.8 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cobalt | 2.34 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 201 | | ug/L | 2,50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 12.6 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 4.23 | l | ug/L | 2.50 | 5 | 11/22/2010 | . sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | -5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | U . | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | . 5 | 11/22/2010 | sv | 1011093 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW018 EPA Tag No.: No Tag Prefix-49 Date / Time Sampled: 10/29/10 13:30

Matrix: Surface Water

Workorder:

C101101

Lab Number: C10

|)110 | 1-35 | 7 | 4 | |
|------|------|---|---|--|
| 1.1 | 1.11 | | | |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|-------------|------------------------|---------|
| 200.7 | Aluminum | 2830 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 71600 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Iron | 413 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Magnesium | 6880 | | ug/L | 100 | . 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 4040 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 593 | J | ug/L | 250 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Sodium | 2190 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 5950 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 0.760 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 19.2 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cebalt | 3.02 | → | ug/L | 0.500 | 5 | 11/22/2010 | . sv | 1011093 |
| 200.8 | Copper | 240 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 11.9 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 5.71 | | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | -11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 2.50 | U · | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | . SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011093 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW019 EPA Tag No.: No Tag Prefix-50

Date / Time Sampled: 10/29/10 12:49 Matrix: Surface Water

Workorder:

Lab Number: C101101-36

| The control of the co | and the second s | والمراجع والمحارسين في المواهد والمحار والمحارض المحار | eren Madisum di Addresia (1952). Ett di metto di accione di dei | difference for the district from the effects of the district of the second | NAME | Dilution | inanggy y andropen part (an array a pro | e Providence (Communication) | ni in State de Parente estado |
|--|--|--|---|--|-------|------------------|--|------------------------------|-------------------------------|
| Method | Parameter | Results | Qualifier | Units | MDL | Factor | Analyzed | Ву | Batch |
| 200.7 | Aluminum | 10100 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 174000 | | ug/L | 100 | 1 . | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 4460 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Magnesium | 13600 | | ug/L | 100 | 1. | 11/22/2010 | SW | 1011094 |
| 200.7 | Manganese | 21900 | • | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Potassium | 1420 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Sodium | 5520 | | ug/L | 250 | . 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Zinc | 27600 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | · U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 3.80 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cadmium | 72.8 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 22.6 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Copper | 820 | | ug/L | 2.50 | 5 . | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 75.6 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | . ¹ 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Nickel | 13.6 | • | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | . 5 | 11/22/2010 | SV . | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/29/10 12:49
Matrix: Surface Water Workorder: C101101 Station ID: UASW019 DUP Lab Number: C101101-37 A EPA Tag No.: No Tag Prefix-57

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 10200 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 174000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | 4570 | • | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Magnesium | 13700 | • | ug/L | 100 | . 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Manganese | 22000 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 1440 | | ug/L | 250 | . 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 5560 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 27700 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | · U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 3.96 · | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cadmium | 74.2 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cobalt | 22.6 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 848 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 76.6 . | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 13.7 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | . 5- | 11/22/2010 | SV | 1011093 |

Project Name:

Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW020

EPA Tag No.: No Tag Prefix-51

Date / Time Sampled: 10/29/10 13:50 Matrix: Surface Water

Workorder:

Lab Number:

C101101-38

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|-------------|---------|------------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 996 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 45100 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Magnesium | 5520 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 306 | | ug/L | 2.00 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Potassium | 462 | . J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sodium | 1150 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Zinc | 1920 | | ug/L | 10.0 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | · U | ug/L | 25.0 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Beryllium . | < 1.00 | Ŭ | ug/L | 0.500 | 5 | 11/22/2010 | sv , | 1011093 |
| 200.8 | Cadmium | 8.88 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200,8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 91.1 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Lead | 4.01 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Molybdenum | < 1.00 | Ü | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 4.42 | J | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | . " | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Thallium | < 5.00 | υ | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW021 EPA Tag No.: No Tag Prefix-58 Date / Time Sampled: 10/31/10 11:10 Matrix: Surface Water

Workorder:

C101101

Lab Number: C101101-39 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|--------------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 1520 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 55900 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Magnesium | 7150 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Manganese | 550 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Potassium | 517 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Sedium | 1260 | | ug/L | 250 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011093 |
| 200.7 | Zinc | 2550 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Barium | 26.3 | J | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | 0.649 | J | ug/L | 0.500 | 5 | 11/22/2010 | SV . | 1011093 |
| 200.8 | Cadmium | 12.0 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Chromium | < 5.00 | υ | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Cobalt | < 1.00 | · U . | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 105 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Lead | 2.62 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Molybdenum | < 1.00 | Ü | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Nickel | 6.43 | • | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV · | 1011093 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | Ŭ | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011093 |
| | | | | | | | • | | |

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

11/22/2010

1

1

1

5

. 5

5

5

5

5

5

5

5

5

5

5

5

5

5

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

1011093

SW

SW

sw

SV

SV

SV

SV

SV

SV

SV

SV

SV

SV

SV

SV

SV

SV

SV

Project Name:

Upper Animas - Water - Oct 2010

856

3570

558

< 5.00

< 10.0

< 50.0

< 1.00

1.76

< 5.00

6.34

13.9

< 1.00

< 1.00

< 5.00

< 5.00

< 2.50

< 5.00

< 10.0

J

U

U

U

U

U

U

U

Ú

U

 \mathbf{U}

U

U

TDF#:

200.7

200.7 200.7

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

200.8

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Potassium

Sodium

Antimony

Arsenic

Barium

Beryllium

Cadmium

Chromium

Cobalt

Copper

Molybdenum

Lead

Nickel

Silver

Selenium

Thallium

Vanadium

Zinc

| Station ID: UASW032 Date / Time Sampled: 10/26/10 00:00 Workorder: C101101 EPA Tag No.: No Tag Prefix-13 Matrix: Surface Water Lab Number: C101101-40 A | | | | | | | | | | | |
|--|-----------|---------|-----------|-------|------|--------------------|------------|----|---------|--|--|
| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch. | | |
| 200.7 | Aluminum | 275 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 | | |
| 200.7 | Calcium | 76900 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 | | |
| 200.7 | Iron | 2630 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 | | |
| 200.7 | Magnesium | 5720 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011093 | | |
| 200.7 | Manganese | 1270 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011093 | | |

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

250

250

10.0

2.50

2.50

25.0

0.500

0.500

2.50

0.500

2.50

0.500

0.500

2.50

2.50

0.500

2.50

5.00

Project Name: Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Workorder: Date / Time Sampled: 10/26/10 00:00 C101101 Station ID: UASW034 C101101-41 A Lab Number: Matrix: Surface Water EPA Tag No.: No Tag Prefix-15

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|--------------|-------|---------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 530 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Calcium | 91000 | - | ug/L | 100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Iron | 1980 | | ug/L | 100 | . 1 | 11/22/2010 | sw | 1011093 |
| 200.7 | Magnesium | 5630 | | ug/L | .100 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Manganese | 2560 | | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Potassium | 1010 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011093 |
| 200.7 | Sodium | 3150 | | ug/L | 250 | 1 - | 11/22/2010 | SW | 1011093 |
| 200.7 | Zinc | 1030 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011093 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Barium | < 50.0 | Ū | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Beryllium | < 1.00 | \mathbf{v} | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Cadmium | 2.96 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 . | 11/22/2010 | SV | 1011093 |
| 200.8 | Cobalt | 7.33 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Copper | 26.1 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Lead | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Molybdenum | 0.670 | J | ug/L | 0.500 W | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Nickel | 2.96 | J | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011093 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Silver | < 2.50 | υ | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011093 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011093 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW036

EPA Tag No.: No Tag Prefix-17

Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water

Workorder:

C101101

Certificate of Analysis

Lab Number: C101101-42 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|----------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 7800 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Calcium | 171000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 12200 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 10600 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 4390 | | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Potassium | 1780 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Sodium | 4460 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Zinc | 2260 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 0.910 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 5.87 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U . | ug/L | 2.50 | 5 - | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 23.5 | • | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 146 | | ug/L | 2.50 | · 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 18.9 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Molybdenum | 0.900 | J | ug/L | 0.500 LL | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 11.7 | i | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/Ĺ | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | 0.891 | l | ug/L | 0.500 ん | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | 6.35 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | Ŭ | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |

Project Name: Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW037 EPA Tag No.: No Tag Prefix-18

Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water

Workorder: C101101

Lab Number: C101101-43

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|----------|-----------|-------|----------------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 7580 | , | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 172000 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Iron | 14800 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 10900 | | ug/L | 100 | . 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Manganese | 5280 | • | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1580 | | ug/L | 250 | 1. | 11/22/2010 | SW | 1011094 |
| 200.7 | Sodium | 4310 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 2800 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.8 | Antimony | < 5.00 | U · | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | Ŭ | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 0.986 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 7.38 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | ·5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 24.7 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Copper | 175 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 22.4 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | 0.557 | J | ug/L | 0.500 <i>l</i> | √ 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 11.5 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | 4.02 | J | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | · < 10.0 | Ŭ | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |
| | | - • | | _ | | | | | |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW039 Workorder: C101401 Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water Lab Number: EPA Tag No.: No Tag Prefix-19

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 8320 | | ug/L | 20.0 | . 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Calcium | 165000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 17600 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 11300 | , | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 5610 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1680 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Sodium | 4090 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 3000 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 0.925 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 7.47 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 27.3 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 184 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 25.7 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 12.7 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | 2.77 | J | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Vanadium | < 10.0 | U . | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011094 |

Project Name: Upper Animas - Water - Oct 2010

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/26/10 00:00 Workorder: Station ID: UASW040 C101101 Matrix: Surface Water Lab Number: C101101-45 A EPA Tag No.: No Tag Prefix-20

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 17100 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 57800 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011094 |
| 200.7 | Iron | 32700 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 12600 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Manganese | 5010 | | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Potassium | 1300 | | ug/L | 250 | 1 | 11/22/2010 | \mathbf{sw} | 1011094 |
| 200.7 | Sodium | 2180 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 1070 | | ug/L | 10.0 | . 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.72 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 4.41 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | ·U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 59.1 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Copper | 229 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 95.6 | | ug/L | 0.500 | , 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 33.2 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | υ | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 . | 11/22/2010 | SV | 1011094 |
| 200.8 | Vanadium | < 10.0 | u U | ug/L | 5.00 | . 5 | 11/22/2010 | SV | 1011094 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW041 Date / Time Sampled: 10/26/10 00:00 Workorder: EPA Tag No.: No Tag Prefix-21 Matrix: Surface Water Lab Number: C101101-46 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 8090 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 171000 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Iron | 17200 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Magnesium | 11300 | | ug/L | 100 | 1 . | 11/22/2010 | SW | 1011094 |
| 200.7 | Manganese | 5710 | | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Potassium | 1680 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 4150 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 3090 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Beryllium | 1.58 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cadmium | 8.71 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 26.7 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Copper | 184 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 24.5 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | - 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 12.9 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Thallium | < 5.00 | Ú | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | . 5 | 11/22/2010 | sv | 1011094 |

Project Name: Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

| | 그렇게 하는 사람들이 되었다. 그 사람들이 가장 없는 사람들이 바다했다면 하는 사람들이 되었다. 그 사람 |
|--|---|
| 그는 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 | on the control of the control of the control of the same of the same of the control of the cont |
| Station ID: UASW042 Date / Time Sampled: 10/26/ | 10 00:00 Workorder: C101101 |
| Station ID: UASW042 Date / Time Sampled: 10/26/ | 10 00:00 workorder: C101101 |
| | |
| o maio describitos de Companiados de Companias de Companias de Compania de Compania de Compania de Compania de | Lab Number: C101101-47 A |
| EPA Tag No.: No Tag Prefix-22 Matrix: Surface Water | Lab Number: Clurivi-4/ 21 |
| THE TANK THE PARTY OF THE PARTY | |
| · · · · · · · · · · · · · · · · · · · | |
| | |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 7870 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 175000 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011094 |
| 200.7 | Iron | 17100 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Magnesium | 11600 | | ug/L | 100 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011094 |
| 200.7 | Manganese | 5900 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1650 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 4280 | • | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 3160 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.36 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 8.14 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 25.6 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 191 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 24.1 | • | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 12.2 | Ē | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | . 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011094 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW043

EPA Tag No.: No Tag Prefix-23

Matrix: Surface Water

Date / Time Sampled: 10/26/10 00:00

Workorder: C101101

Lab Number: C101101-48 A

| Method | Parameter | Results | Qualifier | Units | MDL ₂ | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|------------|-------|------------------|--------------------|------------|---------------|---------|
| 200.7 | Aluminum | 225 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Calcium | 304000 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Iron | 19300 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 18900 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 8020 | | ug/L | 2.00 | 1 | 11/22/2010 | \mathbf{sw} | 1011094 |
| 200.7 | Potassium | 2450 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 9620 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 2450 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011094 |
| 200.8 | Arsenic | < 20.0 | υ | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011094 |
| 200.8 | Barium | < 100 | U | ug/L | 50.0 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.31 | J | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 2.10 | | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 34.9 | | ug/L | 1.00 | 10 | 11/22/2010 | SV | 1011094 |
| 200.8 | Copper | < 10.0 | U . | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | < 2.00 | U · | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | . 10 | 11/22/2010 | SV | 1011094 |
| 200.8 | Nickel | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 10.0 | U . | ug/L | 5.00 | 10 | 11/22/2010 | SV | 1011094 |
| 200.8 | Silver | < 5.00 | Ū | ug/L | 1.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Thallium | < 10.0 | U | ug/L | 5.00 | 10 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 20.0 | · U | ug/L | 10.0 | 10 | 11/22/2010 | SV | 1011094 |

Project Name:

TDF#:

Upper Animas - Water - Oct 2010

9739

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

UASW044 Station ID:

EPA Tag No.: No Tag Prefix-24 Date / Time Sampled: Matrix: Surface Water

10/26/10 00:00

Workorder:

C101101

Certificate of Analysis

Lab Number: C101101-49

MDL Dilution Method Parameter Qualifier Analyzed By Batch Results Units Factor 200.7 Aluminum 8150 ug/L 20.0 1 11/22/2010 SW 1011094 200.7 Calcium 167000 ug/L 100 1 11/22/2010 SW 1011094 200.7 Iron 18200 ug/L 100 1 11/22/2010 SW 1011094 200.7 Magnesium 11200 ug/L 100 1 11/22/2010 SW 1011094 200.7 Manganese 5750 ug/L 2.00 1 11/22/2010 SW 1011094 200.7 Potassium 1650 ug/L 250 1 11/22/2010 SW 1011094 200.7 Sodium 4030 1 ug/L 250 11/22/2010 SW 1011094 200.7 Zinc 3210 ug/L 10.0 1 11/22/2010 SW 1011094 200.8 Antimony 5 11/22/2010 SV 1011094 \mathbf{U} < 5.00 ug/L 2.50 200.8 Arsenic 5 11/22/2010 SV1011094 U < 10.0 ug/L 2.50 200.8 Barium 5 11/22/2010 SV 1011094 < 50.0 U 25.0 ug/L 200.8 Beryllium 1.32 ug/L 0.500 5 11/22/2010 SV 1011094 200.8 Cadmium 9.09 ug/L 0.500 5 11/22/2010 SV 1011094 200.8 Chromium 5 11/22/2010 SV 1011094 < 5.00 U 2.50 ug/L 200.8 Cobalt 28.9 ug/L 0.500 5 11/22/2010 SV 1011094 200.8 Copper 212 ug/L 2.50 5 11/22/2010 SV 1011094 200.8 Lead 26.0 ug/L 0.500 5 11/22/2010 SV 1011094 200.8 Molybdenum 5 11/22/2010 SV 1011094 < 1.00 U ug/L 0.500 200.8 Nickel 14.9 ug/L 5 2.50 11/22/2010 SV 1011094 200.8 Selenium 5 SV11/22/2010 1011094 < 5.00 U ug/L 2.50 200.8 Silver 5 11/22/2010 SV 1011094 U < 2.50 ug/L 0.500 200.8 Thallium 5 11/22/2010 SV 1011094 U < 5.00 ug/L 2.50 200.8 Vanadium 5 11/22/2010 SV1011094 < 10.0 U . ug/L 5.00

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW045 EPA Tag No.: No Tag Prefix-25

Date / Time Sampled: Matrix: Surface Water

10/26/10 00:00

Workorder: C101101

Lab Number: C101101-50 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 4280 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Calcium | 52700 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 268 | | ug/L | 100 | . 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 9690 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Manganese | 1620 | | ug/L | 2.00 | 1 - | 11/22/2010 | SW | 1011094 |
| 200.7 | Potassium | 714 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 1620 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Zinc | 907 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | 29.0 | J | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.05 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 3.79 | | ug/L | 0.500 | . 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 20.6 | | ug/L | 0.500 | 5 . | 11/22/2010 | SV | 1011094 |
| 200.8 | Copper | 150 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Lead | 9.44 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Nickel | 13.6 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | ŭ | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |
| | | | | | | | | | |

TDF #:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW046 Date / Time Sampled: 10/26/10 00:00 Workorder: C101101 Lab Number: C101101-51 A EPA Tag No.: No Tag Prefix-26 Matrix: Surface Water

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 8340 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 170000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 20000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 11300 | . • | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 5780 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1660 | | ug/L | 250 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011094 |
| 200.7 | Sodium | 4030 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 3230 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | Ŭ | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | υ | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | Ü | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.52 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 8.60 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 28.2 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 8.00 | Copper | 212 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 8.00 | Lead | 24.8 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 8.00 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 8.00.8 | Nickel | 13.2 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 8.00 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 8.00 | Silver | < 2.50 | Ŭ | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 00.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 8.00 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011094 |

TDF #:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW047

EPA Tag No.: No Tag Prefix-27

Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water

Workorder:

Lab Number: C101101-52 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 8450 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 170000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 21800 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 11400 | • | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 5860 | | ug/L | 2.00 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Potassium | 1680 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Sodium | 3990 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 3320 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | 3.51 | J | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.44 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 8.99 | | ug/L | 0.500 | . 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 29.4 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 225 | • | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 24.7 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U · | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 14.4 | • | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | < 5.00 | Ų | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011094 |

TDF#:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID:

UASW049

EPA Tag No.: No Tag Prefix-28

Date / Time Sampled: 10/26/10 00:00

Matrix: Surface Water

Workorder:

C101101

Lab Number: C101101-53 A

MDL Dilution Method **Parameter** Analyzed By Batch Results Qualifier Units Factor 200.7 Aluminum 8900 ug/L 20.0 1 11/22/2010 SW. 1011094 200.7 Calcium 171000 ug/L 100 1 11/22/2010 SW 1011094 1 200.7 100 11/22/2010 Iron 24100 ug/L SW 1011094 200.7 Magnesium 11800 ug/L 100 1 11/22/2010 SW 1011094 200.7 Manganese 6180 ug/L 2.00 1 11/22/2010 SW 1011094 200.7 Potassium 1720 ug/L 250 1 11/22/2010 SW 1011094 ug/L 250 1 11/22/2010 SW 200.7 Sodium 3870 1011094 200.7 Zinc 3510 ug/L 10.0 1 11/22/2010 SW 1011094 200.8 Antimony 5 11/22/2010 SV 1011094 U < 5.00 ug/L 2.50 200.8 Arsenic 5.00 J ug/L 2.50 5 11/22/2010 SV1011094 5 200.8 Barium 11/22/2010 SV1011094 < 50.0 U ug/L 25.0 5 200.8 0.500 11/22/2010 SV 1011094 Beryllium 1.27 ug/L 200.8 Cadmium 9.51 ug/L 0.500 5 11/22/2010 SV 1011094 200.8 Chromium 5 11/22/2010 SV 1011094 U < 5.00 ug/L 2.50 200.8 Cobalt 29.8 ug/L 0.500 5 11/22/2010 SV 1011094 5 200.8 Copper 239 ug/L 2.50 11/22/2010 SV 1011094 200.8 25.4 0.500 5 11/22/2010 Lead ug/L SV 1011094 5 11/22/2010 200.8 Molybdenum SV1011094 Ù 0.500 < 1.00 ug/L Nickel 5 SV 200.8 15.3 ug/L 2.50 11/22/2010 1011094 5 200.8 Selenium 11/22/2010 SV 1011094 U < 5.00 ug/L 2.50 5 200.8 Silver 11/22/2010 SV1011094 U < 2.50 ug/L 0.500 Thallium 5 11/22/2010 SV 1011094 200.8 < 5.00 U ug/L 2.50 200.8 Vanadium 5 11/22/2010 SV 1011094 < 10.0 U ug/L 5.00

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

EPA Tag No.: No Tag Prefix-29 Matrix: Surface Water

Station ID: UASW050

Date / Time Sampled: 10/26/10 00:00

Workorder:

C101101

Certificate of Analysis

Lab Number: C101101-54 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 8830 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 169000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 23900 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 11700 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 6240 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1700 | | ug/L | 250 | - 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 3810 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 3560 | | ug/L | 10.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | 4.63 | J | ug/L | 2.50 | 5 . | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Beryllium | 1.50 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cadmium | 9.70 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 28.7 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 235 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | .Lead | 25.3 | • | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Nickel | 15.2 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |
| | | | | | | | | | |

TDF#:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW054

EPA Tag No.: No Tag Prefix-30

Date / Time Sampled: 10/26/10 00:00 Matrix: Surface Water

Workorder: C101101

Lab Number:

C101101-55 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|-----|---------|
| 200.7 | Aluminum | 14400 | | ug/L | 20.0 | - 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 35400 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 27600 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 7560 | | ug/L | 100 | 1 | 11/22/2010 | SW- | 1011094 |
| 200.7 | Manganese | 826 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 2130 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 1230 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 1350 | • | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U· | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | 17.0 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 0.726 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium . | 5.33 | • | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cobalt | 26.1 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 190 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 57.3 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 19.6 | | ug/L | 2.50 | 5 . | 11/22/2010 | sv | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | < 5.00 | U . | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |

TDF #:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW056 EPA Tag No.: No Tag Prefix-31 Date / Time Sampled: 10/27/10 00:00

Workorder:

Matrix: Surface Water

Lab Number: C101101-56

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|----|---------|
| 200.7 | Aluminum | 5440 | | ug/L | 20.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Calcium | 178000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 16000 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Magnesium | 12200 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 8750 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1100 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 4280 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Zinc | 4850 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.75 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 12.7 | • | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Chromium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 30.4 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 355 | • | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 26.8 | | ug/L | 0.500 | , 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 12.2 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011094 |
| | | | | | | | | | |

TDF #:

DG-216

Certificate of Analysis

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASW058 Date / Time Sampled: 10/27/10 00:00 Workorder: C101101
EPA Tag No.: No Tag Prefix-32 Matrix: Surface Water Lab Number: C101101-57 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------|---------|
| 200.7 | Aluminum | 5510 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 182000 | | ug/L | 100 | 1 . | 11/22/2010 | sw | 1011094 |
| 200.7 | Iron | 15900 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Magnesium | 12600 | | ug/L | 100 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Manganese | 9150 | | ug/L | 2.00 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Potassium | 1070 | | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 4370 | | ug/L | 250 | 1 | 11/22/2010 | · SW | 1011094 |
| 200.7 | Zinc | 5130 | | ug/L | 10.0 | 1 | 11/22/2010 | sw | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 1.52 | | ug/L | 0.500 | 5 | 11/22/2010 | sv · | 1011094 |
| 200.8 | Cadmium | 13.7 | | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Chromium | < 5.00 | , , | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 30.4 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 366 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Lead | 27.9 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Nickel | 12.6 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | · U | ug/L | 0.500 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 · 1 | 11/22/2010 | sv | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | sv | 1011094 |

Project Name:

Upper Animas - Water - Oct 2010

TDF#:

DG-216

Metals (Total Recov) by EPA 200/7000 Series Methods

| Station ID: EPA Tag No. | UASW059 : No Tag Prefix-56 | | | ne Sampled: Surface Water | 10/31/10 12:40 | Workord Lab Nun | | 01101 C101101- | 58 A |
|----------------------------|-------------------------------|---------|-----------|------------------------------|----------------|--------------------|----------|-------------------|-------|
| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | l By | Batch |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|-----------|
| 200.7 | Aluminum | 13200 | | ug/L | 20.0 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Calcium | 17400 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Iron | 46400 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Magnesium | 12000 | | ug/L | 100 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Manganese | 8740 | | ug/L | 2.00 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011094 |
| 200.7 | Potassium | 362 | J | ug/L | 250 | 1 | 11/22/2010 | sw | 1011094 |
| 200.7 | Sodium | 626 | | ug/L | 250 | 1 | 11/22/2010 | SW | 1011094 |
| 200.7 | Zinc | 24900 | | ug/L | 10.0 | 1 | 11/22/2010 | $\mathbf{s}\mathbf{w}$ | 1011094 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | . 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Arsenic | 26.9 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Barium | < 50.0 | U | ug/L | 25.0 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Beryllium | 0.940 | J | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Cadmium | 105 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | . 1011094 |
| 200.8 | Chromium | 5.46 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Cobalt | 25.6 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Copper | 4690 | | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Lead | 33.8 | | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Molybdenum | < 1.00 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Nickel | 16.4 | | ug/L | 2.50 | 5 | 11/22/2010 | SV | 1011094 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Silver | < 2.50 | U | ug/L | 0.500 | 5 | 11/22/2010 | sv | 1011094 |
| 200.8 | Thallium | < 5.00 | U | ug/L | 2.50 | 5 . | 11/22/2010 | SV | 1011094 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 11/22/2010 | SV | 1011094 |

[&]quot;J" Qualifier indicates an estimated value

REGION VIII DATA VALIDATION REPORT INORGANIC

| Case No. / TDD No. | Site Na | ame | Operable Unit |
|----------------------------|----------------------------|-----------------------------|-----------------------|
| C101003, C101004 / 1008-13 | Upper Animas M District | lining | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | TDF No. | Laboratory DPO/Region |
| ESAT - TechLaw, Inc. | | DG-214 water and soil | |

| Review Assigned Date | March 28, 2011 | Data Validator <u>Diane Short</u> | & Assoc. Review |
|-------------------------|----------------|-----------------------------------|-----------------|
| Review Completion Date_ | March 30, 2011 | Report Reviewer | Kent Alexander |

| Sample ID | Matrix | Analysis |
|--------------------------|----------|---|
| UASE001D | Sediment | Dissolved (water) and Total |
| UASE002 |] | Recoverable (soil) Metals by EPA Methods 200.7 and 200.8 |
| UASE003 | 1 | |
| UASE001 | | |
| UASW001 | Water | , |
| UASW001 (should be 001D) | - | |
| UAWS002 | | |
| UASW003 | | |

DATA QUALITY STATEMENT

| | · | | | | | | |
|------------------|--|--|--|--|--|--|--|
| () | Data are ACCEPTABLE according to EPA Functional guidelines with no qualifiers (flags) added by the reviewer. | | | | | | |
| () | Data are UNACCEPTABLE according to EPA Functional Guidelines. | | | | | | |
| (X) | Data are acceptable with QUALIFICATIONS noted in review. | | | | | | |
| Telepl | one/Communication Logs Enclosed? Yes NoX | | | | | | |
| CLP P attenti | roject Officer Attention Required? Yes No X If yes, list the items that required: | | | | | | |

INORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," (NFG) January 2010.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-20% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, TDF No. DG-214, consisted of 4 sediment samples for Total Recoverable Metals and 4 water samples for Dissolved Metals by Methods 200.7 and 200.8 by ICP. The following table lists the data qualifiers added to the sample analyses. Please see Data Qualifier Definitions, attached to the end of this report.

Deliverables:

Note that the laboratory forms do not contain times of analysis on the result forms nor on the QC and Calibration Forms. This is not uncommon for CLP-type forms, but it means that the raw data must be spot checked to verify the calibration associations. As there were no outliers, no further action is taken.

Sample Tracking:

There are Deliverable Submission Forms, but no actual laboratory log-in forms. The integrity of the samples cannot be verified. There are no courier forms or tracking identifications. Sample authentication cannot be verified. Samples were collected on 10/8/2010 and relinquished on 10/11/2010. There is no record of custody for that time period.

For the waters samples, the location ID was logged for the sample ID so the UASW001 and UASW001D distinction was not carried over into the laboratory result forms. Laboratory sample C1010004-2 should be client ID UASW001D.

No shipping or receiving problems were noted in the narrative. As the client was not notified of custody or integrity issues, no further action is taken.

<u>Blanks:</u>

There are results reported for many of the ICB and CCBs, but none are above the MDLs recorded on the result forms (the ICB/CCB forms only note the PQLs) with the exception of iron reported at 28.9 mg/kg for QC set 1010049 for ICP soils. All data are > 5 x Blank and no qualification is required.

The laboratory notes that cadmium was detected in the prep blank at $< 2 \times PQL$. The result for cadmium is reported at 103 ug/kg. The RL for cadmium was raised from 20 ug/kg to 30 ug/kg. The client will need to determine if the elevated limits meet project criteria. All client data were $> 5 \times PQL$ blank and no qualification is required.

There are no rinse blanks, which would be appropriate if dedicated equipment was used.

Interference Check:

The ICSA value for iron is 250,000 ug/l for water or 25,000 mg/kg for soil . Iron values for the sediments were greater than the ICSA, but the QC check was well within limits and no qualifications were required.



<u>Laboratory Control Sample:</u>

The LCS recovery for barium was at 56%. The LCS limit noted is 0 - 152%. These are extremely wide windows and the reviewer recommends considering this low bias in the use of the barium data. Data were not, however, qualified per the EPA guidance.

Detection Limits:

Note that the sediment samples for ICP were diluted 5x and those for ICPMS were diluted 10X. The analytes run by ICPMS were extremely high for lead, arsenic and vanadium. The review recommends using the ICP values that are in the raw data for these analytes, although the results were within an acceptable RPD. It is the lower values that are significantly different between the two types of analysis/instrumentation. The client will need to determine if the elevated limits meet project criteria.

Matrix Spike

Data are qualified JMS#, where # is the spike recovery. The EPA qualifier is 'J'. Data could be biased high or low proportional to the recovery. The sample results were > 4 x spike for outlier sediment spikes for aluminum, barium, iron, manganese, magnesium, zinc and calcium. Data are not qualified as the recovery is not statistically valid. The laboratory limits (65-125%) are wider than the CLP limits. The limits noted in the NFG are used for qualification. The following table lists the spike recoveries outside control limits, samples affected, and data qualifiers:

Field Duplicates:

If the UASE001 and 001D and the UASW001 and 001D are field duplicates, they meet the field duplicate precision criteria for low level and $> 5 \times CRQL$ results.

| Sample ID | ************************************** | Qualifiers | Reason for Qualification | Review Section |
|----------------------|--|------------|--|-------------------|
| All sediment samples | Barium | J- | LCS 56% - recommended, but not applied | 13 |
| All sediment samples | Sodium | J+ | MS 136% | 9 |
| All sediment samples | Titanium | J- | MS 67% | |

2.

3.

URS Operating Services, Inc.

| 1 | Г | ET | л. | ER | A | RI | FC |
|---|-----|----|------|----|---|-----|----|
| | • • | | /L Y | | _ | 111 | |

| DELIVERABLES | |
|---|---|
| All deliverables were present as specified in the Statement of Work. YesNo_X | |
| Comments: There are Deliverable Submission Forms, but no actual laboratory log-in forms. The integrity of the samples cannot be verified. There are no courier forms or tracking identifications. Sample authentication cannot be verified. Note that the laboratory forms do not contain times of analysis on the result forms nor on the QC and Calibration Forms. This is not uncommon for CLP-type forms, but it means that the raw data must be spot checked to verify the calibration associations. As there were no outliers, no further action is taken. | |
| HOLDING TIMES AND PRESERVATION CRITERIA | |
| All technical holding times and preservation criteria were met. Yes_X No | |
| Comments: The samples were analyzed within specified holding times (180 days for metals and 28 days for mercury). No temperature reading for the cooler was recorded. Per the chain of custody, there were pre-printed fields that noted the sediment samples were (to be) preserved to 4 C and the waters to pH<2, but this cannot be verified as there are no log-in forms. | • |
| No shipping or receiving problems were noted in the narrative. As the client was not notified of custody or integrity issues, no further action is taken. | |
| INSTRUMENT CALIBRATIONS: STANDARDS AND BLANKS | |
| Initial instrument calibrations were performed according to SOW requirements. Yes_XNo | |
| Comments: None. | |
| The instruments were calibrated daily and each time an analysis run was performed. Yes X No | |
| Comments: None. | |
| The instruments were calibrated using one blank and the appropriate number of standards. Yes X No No No No No No No No No No No No No | |
| Comments: None. | |

6.

7.

| 4. | SAMPLE A | NALYSIS RESULTS |
|----|---|--|
| • | Sample analy Yes_X | ses were entered correctly on Form Is. No |
| | Comments: | None. |
| 5. | INITIAL AN | D CONTINUING CALIBRATION VERIFICATION |
| | The initial and SOW requires | d continuing calibration verification standards (ICV and CCV, respectively) met |
| | Yes X | |
| | Comments: | None. |
| | | n verification results were within 90-110% recovery for metals, 85-115% for 80-120% for mercury. No |
| | Comments: | None. |
| | The continuin Yes_X_ | g calibration standards were run at 10% frequency or every two hours. No |
| | Comments: | None. |
| 6. | CRQL CHE | CK STANDARD |
| | | Standards (CRI) were analyzed at the beginning of each sample analysis run and rtical samples, immediately preceding the interferences check sample analyses, but analysis. No NA |
| | Comments: | None. |
| | The CRI recover for required election Yes X | veries were within 70-130% (50 – 150% for ICP: Sb, Pb, Tl; ICP/MS: Co, Mn, Zn) ements. No |
| | Comments: | None. |
| 7. | BLANKS | |
| • | The initial and requirements. | continuing calibration blanks (ICB and CCB, respectively) met SOW No_X_ |

URS Operating Services, Inc.

Comments: There are results reported for many of the ICB and CCBs, but none are above the MDLs recorded on the result forms (the ICB/CCB forms only note the PQLs) with the exception of iron reported at 28.9 mg/kg for QC set 1010049 for ICP soils. All data are > 5 x Blank and no qualification is required.

| ~ | valibration blanks were run at 10% frequency. No |
|-------------------------------------|---|
| Comments: | None. |
| delivery group (v | paration blank was run at the frequency of one per twenty samples, or per sample whichever is more frequent), and for each matrix analyzed. No |
| Comments: No | one |
| | nks were free of contamination. No \underline{X} |
| The result for cac to 30 ug/kg. The | ne laboratory notes that cadmium was detected in the prep blank at < 2 x PQL. dmium is reported at 103 ug/kg. The RL for cadmium was raised from 20 ug/kg client will need to determine if the elevated limits meet project criteria. All > 5 x blank and no qualification is required. |
| ICP INTERFE | RENCE CHECK SAMPLE |
| but not prior to the | ence check sample (ICS) was run at the beginning of each sample analysis run, ne ICV. |
| Comments: | None. |
| result was within | of the analytes in the ICS solutions were within the range of 80-120% or the ±2x the CRQL. |
| Comments: | None. |
| - | or aluminum, calcium, iron, and magnesium were less than the ICSA values. No \underline{X} . |
| values for the sed | ICSA value for iron is 250,000 ug/l for water or 25,000 mg/kg for soil. Iron liments were greater than the ICSA, but The QC check was well within limits ions were required. |

8.

| Yes_ | | potential false po | ositives and false negatives. | | | |
|---|--|---|--|---|--|--|
| 9. MAT | RIX SPIKE SAMP | LE ANALYSIS | | | | |
| one p | trix spike sample wa er sample delivery g XNo | roup (whichever i | very twenty or fewer sample s more frequent). | es of a similar matrix, or | | |
| Com | ments: UASE001 | and UASW001 | were used for the MS/MSD | samples. | | |
| The p Yes_ | ercent recoveries (% XNo | • | red correctly. | | | |
| Comr | ments: None. | | · | • | | |
| Spike recoveries were within the range of 75-125% (an exception is granted where the sample concentration is four times the spike concentration). YesNo_X_ | | | | | | |
| or lov spikes qualif than t the sp | y proportional to the s for aluminum, barium ted as the recovery in the CLP limits. The | recovery. The same, iron, manganes not statistically limits noted above | re # is the spike recovery. Dample results were > 4 x spikese, magnesium, zinc and cavalid. The laboratory limits are used for qualification. Toost digestion spike recoveries | see for outlier sediment alcium. Data are not s (65-125%) are wider The following table lists | | |
| Element | Matrix Spike %R | Post-Digestion %R | Samples Affected | Qualifiers: | | |
| Sodium | 136/ 136 | 104% | All sediment detects | JMS136 | | |
| Titanium | 67/71 | Not in post spike | All sediment samples | JMS67 | | |
| A pos Pre-di | gestion/pre-distillation four times the spin | erformed for those on spike recovery | e elements that did not meet falls outside of control limit, exception: Ag, Hg). | | | |

Comments:

See Section 9.0.

URS Operating Services, Inc.

| 1 1. | DUPLICATE SAMPLE ANALYSIS Duplicate sample analysis was performed with every twenty or fewer samples of a similar matrix or one per sample delivery group (whichever is more frequent). | | | |
|-------------|--|--|--|--|
| | | | | |
| | Yes_X | No NA | | |
| | Comments: | Duplicates and MS Duplicates are reported. | | |
| | | ere calculated correctly. | | |
| | YesX | No NA | | |
| | Comments: | None. | | |
| | | oncentrations greater than five times the CRQL, RPDs were < 20% (limits of <35% /sediments/tailings samples). | | |
| | Yes_X_ | No NA | | |
| | Comments: | None. | | |
| | | | | |
| | For sample co the control wi Yes X | ncentrations less than five times the CRQL, duplicate analysis results were within ndow of < CRQL (two times CRQL for soils). No NA | | |
| | Comments: | None. | | |
| 12. | ICP-MS | | | |
| | The ICP MS to Yes X | une met SOW requirements. No NA | | |
| | were met. The were reported | the ICP MS instrument was correctly tuned prior to analysis and all tuning criteria $\%$ RSDs were within the 5% limits for the tune. The Ba/Ba++ and Ce/CeO ratios and within limits. The amu (atomic mass units) at half peak width were within ange of $0.7-0.8$). | | |
| | The minimum analyte masses | number of internal standards were added to the analyses and bracketed the target s. | | |
| | Yes_X_ | No | | |
| | Comments: | None. | | |
| | All percent rel Yes X | ative intensities were within 60-125%. No | | |

12.

| URS | Operating Services, Inc. Data Validation Repor |
|-----|--|
| | Comments: None. |
| 13. | LABORATORY CONTROL SAMPLE |
| | The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). Yes X No |
| | Comments: Note that for sediments, the LCS does not contain titanium, strontium or molybdenum. This is not uncommon as the LCS is a standard reference soil and these analytes are not routinely present. |
| | All results were within control limits. Yes X No No No No No No No No No No No No No |
| | Comments: The LCS recovery for barium was at 56%. The LCS limit noted is $0-152\%$. These are extremely wide windows and the reviewer recommends considering this low bias in the use of the barium data. Data were not, however, qualified per the EPA guidance. |
| 14. | ICP-SERIAL DILUTION QC |
| | A serial dilution was performed for ICP analysis with every twenty or fewer samples of a similar matrix, or one per sample delivery group, whichever is more frequent. Yes X No |
| | Comments: None. |
| | The serial dilution was without interference problems as defined by the SOW or NFG. Yes X No |
| | Comments: The serial dilution %Ds were less than 10% or the original sample result was less than 50> the RL. |
| 15. | ANNUAL METHOD DETECTION LIMITS (MDL) |
| | MDLs were provided for all elements on the target analyte list. Yes X No |
| | Comments: Last updated February 2010 |

Reported MDLs met SOW requirements.

No___



16.

Comments: Note that the sediment samples for ICP were diluted 5x and those for ICPMS were diluted 10X. The analytes run by ICPMS were extremely high for lead, arsenic and vanadium. The review recommends using the ICP values that are in the raw data for these analytes, although the results were within an acceptable RPD. It is the lower values that are significantly different between the two types of analysis/instrumentation. These can be reported in a comparison table upon request. The project manager will determine if project limits are met.

INTERELEMENT CORRECTION FACTORS FOR ICP

| | Interelement | corrections for ICP were reported. |
|-----|----------------------------|--|
| | Yes | No_X_ |
| | Comments: | Interelement corrections were not included. No action was required. |
| 17. | ICP LINEA | R RANGES |
| | ICP linear ran | ges were reported. |
| | Yes_X | No |
| | Comments: | The linear ranges were updated in February 2010. |
| 18. | PREPARAT | TON LOG |
| | | n the preparation of samples for analysis was reported on laboratory bench sheets as data deliverable. |
| | Yes X | |
| | Comments: | None. |
| 19. | ANALYSIS I | RUN LOG |
| | A Form with Yes X | the required information was filled out for each analysis run in the data package. No |
| | Comments: | None. |
| | | |
| 20. | Additional Co | omments or Problems/Resolutions Not Addressed Above |
| | Yes_X | No |
| | and UASW00 sample C1010 | the water samples, the location ID was logged for the sample ID so the UASW001 ID distinction was not carried over into the laboratory result forms. Laboratory 004-2 should be client ID UASW001D. collected on 10/8/2010 and relinquished on 10/11/2010. There is no record of at time period. |

If the UASE001 and 001D and the UASW001 and 001D are field duplicates, they meet the field duplicate precision criteria for low level and $> 5 \times CRQL$ results.

There are no rinse blanks, which would be appropriate if dedicated equipment was used.

INORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality. Use of additional qualifiers should be carefully considered. Definitions for all qualifiers used should be provided with each report.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." The data are unusable. Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- The associated numerical value is an estimated quantity and is the approximate concentration of the analyte in the sample.
- J+ The associated numerical value is an estimated quantity but the result may be biased high.
- J- The associated numerical value is an estimated quantity but the result may be biased low.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound may or may not be present in the sample.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

ACRONYMS

CCB Continuing Calibration Blank

CCV Continuing Calibration Verification

CFR Code of Federal Regulations CLP Contract Laboratory Program

CRQL Contract Required Quantitation Limit

CRI CRQL standard required for ICP

CVCold Vapor

EPA U.S. Environmental Protection Agency

ICB Initial Calibration Blank **ICP** Inductively Coupled Plasma **ICS** Interference Check Sample

ICSA Interference Check Sample (Solution A) **ICSAB** Interference Check Sample (Solution AB)

ICV Initial Calibration Verification LCS Laboratory Control Sample MDL Method Detection Limit

MS Matrix Spike **MSD** MS Duplicate

NFG EPA CLP National Functional Guidelines for Inorganic Data Review

PDS Post Digestion Spike QC Quality Control

RPD Relative Percent Difference **RPM** Regional Project Manager

RSD Percent Relative Standard Deviation

SA Spike Added

SAS Special Analytical Services **SDG** Sample Delivery Group SOW Statement of Work SR Sample Result

SSR Spiked Sample Result

Project Name: Upper Animas - Rush SED - Oct 2010

TDF #:

DG-214

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASE001D Date / Time Sampled: 10/08/10 00:00 C101003 Workorder: EPA Tag No.: Lab Number: C101003-01 Matrix: Sediment

| Method | Parameter | Results | Qualifier | Units | MDL . | Dilution Factor | Analyzed | Ву | Batch |
|-------------------|------------|---------|-----------|--------------|---------|--------------------|------------|------------------------|---------|
| EPA 200.2 / 200.8 | Antimony | 4230 | | ug/kg dry wt | 499 | 10_ | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Arsenic | 45400 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Cadmium | 990 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Chromium | 3500 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Cobalt | 5360 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Lead | 460000 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Molybdenum | 4660 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Nickel | 2840 | , | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Selenium | 2530 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Silver | 2570 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Thallium | < 997 | U | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Vanadium | 19000 | | ug/kg dry wt | 997 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2/200.7 | Aluminum | 8250 | • | mg/kg dry wt | 9.97 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Barium | 215 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Beryllium | < 2.49 | U , | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Calcium | 1550 | | mg/kg dry wt | 49.9 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Copper | . 116 | | mg/kg dry wt | 0.997 | . 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Iron | 58400 | | mg/kg dry wt | 49.9 | 5 | 10/12/2010 | $\mathbf{s}\mathbf{w}$ | 1010049 |
| EPA 200.2/200.7 | Magnesium | 2630 | | mg/kg dry wt | 49.9 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Manganese | 801 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Potassium | 1220 | | mg/kg dry wt | 125 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Sodium | < 249 | U | mg/kg dry wt | 125 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Strontium | 83.6 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Titanium | 23,8 | | mg/kg dry wt | 2.49 J- | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Zinc | 339 | | mg/kg dry wt | 4.99 | 5 | 10/12/2010 | SW | 1010049 |

Project Name: Upper Animas - Rush SED - Oct 2010

TDF#:

DG-214

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASE002 Date / Time Sampled: 10/08/10 00:00 Workorder: C101003 EPA Tag No.: Matrix: Sediment Lab Number: C101003-02 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|-------------------|------------|---------|-----------|--------------|---------|--------------------|------------|-----|---------|
| EPA 200.2 / 200.8 | Antimony | 5800 | | ug/kg dry wt | 500 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Arsenic | 49600 | | ug/kg dry wt | 500 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Cadmium | 674 | | ug/kg dry wt | 99.9 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Chromium | 2890 | | ug/kg dry wt | 500 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Cobalt | 2600 | | ug/kg dry wt | 99.9 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Lead | 382000 | | ug/kg dry wt | 99.9 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Molybdenum | 3410 | | ug/kg dry wt | 99.9 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Nickel | 2230 | | ug/kg dry wt | 500 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Selenium | 2760 | | ug/kg dry wt | 500 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Silver | 2820 | | ug/kg dry wt | 99.9 | 10 | 10/13/2010 | S₹V | 1010049 |
| EPA 200.2 / 200.8 | Thallium | 1170 | | ug/kg dry wt | 500 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Vanadium | 18300 | | ug/kg dry wt | 999 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2/200.7 | Aluminum | 5420 | | mg/kg dry wt | 9.99 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Barium | 326 | | mg/kg dry wt | 0.999 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Beryllium | < 2.50 | U | mg/kg dry wt | 0.999 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Calcium | 863 | | mg/kg dry wt | 50.0 | 5 - | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Copper | 39.5 | | mg/kg dry wt | 0.999 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Iron | 46900 | • | mg/kg dry wt | 50.0 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Magnesium | 2220 | | mg/kg dry wt | 50.0 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Manganese | • 235 | | mg/kg dry wt | 0.999 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200,2/200.7 | Potassium | 1380 | | mg/kg dry wt | 125 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Sodium | < 250 | U | mg/kg dry wt | 125 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Strontium | 90.9 | | mg/kg dry wt | 0.999 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Titanium | 17.5 | • | mg/kg dry wt | 2.50 フー | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Zine | 199 | | mg/kg dry wt | 5.00 | 5 | 10/12/2010 | sw | 1010049 |

Project Name: Upper Animas - Rush SED - Oct 2010

TDF #:

DG-214

Metals (Total Recov) by EPA 200/7000 Series Methods

Date / Time Sampled: 10/08/10 00:00 Station ID: UASE003 Workorder: C101003 EPA Tag No.: Matrix: Sediment Lab Number: C101003-03

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|-------------------|------------|-------------|-----------|--------------|---------|--------------------|------------|------------------------|---------|
| EPA 200.2 / 200.8 | Antimony | 1190 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Arsenic | 19800 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Cadmium | 8840 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Chromium | 4120 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Cobalt | 11500 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Lead | 882000 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | ·sv | 1010049 |
| EPA 200.2 / 200.8 | Molybdenum | 7200 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Nickel | 7950 | | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Selenium | 877 | J | ug/kg dry wt | 499 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Silver | 5080 | | ug/kg dry wt | 99.7 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Thallium | 503 | J | ug/kg dry wt | 499 | 10 | 10/13/2010 | $\mathbf{s}\mathbf{v}$ | 1010049 |
| EPA 200.2 / 200.8 | Vanadium | 18000 | | ug/kg dry wt | 997 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2/200.7 | Aluminum | 9830 | | mg/kg dry wt | 9.97 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Barium | 128 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Beryllium | 1.58 | J | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Calcium | 3420 | | mg/kg dry wt | 49.9 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Copper | 203 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | \mathbf{SW} | 1010049 |
| EPA 200.2/200.7 | Iron | 24800 | | mg/kg dry wt | 49.9 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Magnesium | 5520 | | mg/kg dry wt | 49.9 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Manganese | 8730 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Potassium | 750 | | mg/kg dry wt | 125 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Sodium | < 249 | U | mg/kg dry wt | 125 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Strontium | 44.9 | | mg/kg dry wt | 0.997 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Titanium | 62.7 | | mg/kg dry wt | 2.49 ゴー | 5 . | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Zinc | 2400 | | mg/kg dry wt | 4.99 | 5 | 10/12/2010 | SW | 1010049 |

TDF#:

DG-214

Metals (Total Recov) by EPA 200/7000 Series Methods

Station ID: UASE001 Date / Time Sampled: 10/08/10 00:00 Workorder: C101003
EPA Tag No.: Matrix: Sediment Lab Number: C101003-04 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|-------------------|------------|---------|-----------|--------------|---------|--------------------|------------|------------------------|---------|
| EPA 200.2 / 200.8 | Antimony | 5410 | | ug/kg dry wt | 494 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Arsenic | 52900 | | ug/kg dry wt | 494 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Cadmium | 829 | | ug/kg dry wt | 98.8 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Chromium | 3490 | | ug/kg dry wt | 494 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Cobait | 4590 | | ug/kg dry wt | 98.8 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Lead | 531000 | | ug/kg đry wt | 98.8 | 10 | 10/13/2010 | SV | 1010049 |
| EPA 200.2 / 200.8 | Molybdenum | 5560 | | ug/kg dry wt | 98.8 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Nickel | 2830 | | ug/kg dry wt | 494 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Selenium | 2980 | | ug/kg dry wt | 494 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Silver | 3790 | | ug/kg dry wt | 98.8 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Thallium | 643 | 1 | ug/kg dry wt | 494 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2 / 200.8 | Vanadium | 19300 | ٠. | ug/kg dry wt | 988 | 10 | 10/13/2010 | sv | 1010049 |
| EPA 200.2/200.7 | Aluminum | 9450 | | mg/kg dry wt | 9.88 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Barium | 261 | | mg/kg dry wt | 0.988 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Beryllium | < 2.47 | U | mg/kg dry wt | 0.988 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Calcium | 1620 | • | mg/kg dry wt | 49.4 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Copper | 158 | | mg/kg dry wt | 0.988 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Iron | 63100 | | mg/kg dry wt | 49.4 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Magnesium | 2490 | | mg/kg dry wt | 49.4 | 5 | 10/12/2010 | SW | 1010049 |
| EPA 200.2/200.7 | Manganese | 602 | | mg/kg dry wt | 0.988 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Potassium | 1330 | | mg/kg dry wt | 124 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Sodium | < 247 | U | mg/kg dry wt | 124 | 5 | 10/12/2010 | $\mathbf{s}\mathbf{w}$ | 1010049 |
| EPA 200.2/200.7 | Strontium | 91.8 | | mg/kg dry wt | 0.988 | 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Titanium | 20.1 | | mg/kg dry wt | 2.47 3- | - 5 | 10/12/2010 | sw | 1010049 |
| EPA 200.2/200.7 | Zinc | 364 | | mg/kg dry wt | 4.94 | 5 | 10/12/2010 | sw | 1010049 |

[&]quot;J" Qualifier indicates an estimated value

TDF #:

DG-214

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: UASW001 Date / Time Sampled: 10/08/10 00:00 Workorder: C101004

EPA Tag No.: Matrix: Water Lab Number: C101004-01 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|------------|-------|------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 3240 | | ug/L | 20.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Barium | 18.1 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Beryllium | < 5.00 | U | ug/L | 2.00 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Całcium | 107000 | | ug/L | 100 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Copper | 88.6 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Iron | 2170 | | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Magnesium | 6790 | | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Manganese | 3040 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Potassium | 1200 | | ug/L | 250 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Sodium | 3300 | | ug/L | 250 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Strontium | 1230 | | ug/L | 2.00 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Thallium | < 50.0 | U | ug/L | 20.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Titanium | < 20.0 | U | ug/L | 5.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Zinc | 1530 | | ug/L | 10.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | SV | 1010052 |
| 200.8 | Cadmium | 4.54 | | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Cobalt | 12.7 | | ug/L | 1.00 | 10 | 10/12/2010 | SV | 1010052 |
| 200.8 | Lead | 8.38 | | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Molybdenum | 1.23 | J | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Nickel | 6.69 | J | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Silver | 1.19 | J . | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 10/12/2010 | sv . | 1010052 |
| 2340B | Hardness | 295 | | mg/L | 2 | 1 | 10/11/2010 | sw | 1010050 |

Certificate of Analysis

TDF #:

DG-214

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: UASW00 Date / Time Sampled: 10/08/10 00:90 Workorder: C101004
EPA Tag No.: Water Lab Number: C101004-02 A

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 3320 | | ug/L | 20.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Barium | 18.4 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Beryllium | < 5.00 | U | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Calcium | 108000 | | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Copper | 91.3 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Iron | 2180 | | ug/L | 100 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Magnesium | 6930 | | ug/L | 100 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Manganese | 3060 | | ug/L | 2.00 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Potassium | 1210 | | ug/L | 250 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Sodium | 3350 | | ug/L | 250 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Strontium | 1260 | | ug/L | 2.00 | 1. | 10/11/2010 | sw | 1010050 |
| 200.7 | Thallium | < 50.0 | U | ug/L | 20.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Titanium | < 20.0 | U | ug/L | 5.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Zinc | 1550 | | ug/L | 10.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Cadmium | 4.91 | - | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Chromium | < 10.0 | ·U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Cobalt | 11.5 | • | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Lead | 7.99 | | ug/L | 1.00 | - 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Nickel | 5.49 | J | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 |) Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 10/12/2010 | sv | 1010052 |
| 2340B | Hardness | 299 | | mg/L | 2 | 1 | 10/11/2010 | sw | 1010050 |

Project Name: Upper Animas - Rush Water - Oct 2010

TDF #:

DG-214

Metals (Dissolved) by EPA 200/7000 Series Methods

Station ID: UASW002 EPA Tag No.: Workorder: C101004 Date / Time Sampled: 10/08/10 00:00 Lab Number: C101004-03 A Matrix: Water

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 7350 | | ug/L | 20.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Barium | 12.5 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Beryllium | < 5.00 | U | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Całcium | 165000 | | ug/L | 100 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Copper | 180 | | ug/L | 2.00 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Iron | 7260 | | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Magnesium | 10400 | | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Manganese | 4570 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Potassium | 1750 | | ug/L | 250 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Sodium | 4350 | • | ug/L | 250 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Strontium | 1950 | | ug/L | 2.00 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Thallium | < 50.0 | U | ug/L | 20.0 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Titanium | < 20.0 | U | ug/L | 5.00 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Zinc | 2590 | | ug/L | 10.0 | 1. | 10/11/2010 | \mathbf{sw} | 1010050 |
| 200.8 | Antimony | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | SV | 1010052 |
| 200.8 | Arsenic | < 20.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Cadmium | 7.50 | | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Chromium | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | SV | 1010052 |
| 200.8 | Cobalt | 22.5 | | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Lead | 30.7 | | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Molybdenum | < 2.00 | U | ug/L | 1.00 | · 10 | 10/12/2010 | SV | 1010052 |
| 200.8 | Nickel | 11.4 | | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Selenium | < 10.0 | U | ug/L | 5.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Silver | < 5.00 | U | ug/L | 1.00 | 10 | 10/12/2010 | sv | 1010052 |
| 200.8 | Vanadium | < 20.0 | U | ug/L | 10.0 | 10 | 10/12/2010 | sv | 1010052 |
| 2340B | Hardness | 456 | | mg/L | 2 | 1 | 10/11/2010 | sw | 1010050 |

Project Name: Upper Animas - Rush Water - Oct 2010

TDF#:

DG-214

Metals (Dissolved) by EPA 200/7000 Series Methods

| Station ID: UA | SW003 | | Date / Time Sampled: | 10/08/10 00:00 | Workorder: C101004 | |
|----------------|-------|---|----------------------|--|------------------------|---|
| EPA Tag No.: | | والمنافقة والمعادلة والمعاددة والمعاددة والمعاددة والمعاددة والمعاددة والمعاددة والمعاددة والمعاددة والمعاددة | Matrix: Water | erentustak sekeliko seorrasi menerasi saja ten manan alau saja ten m | Lab Number: C101004-04 | A |

| Method | Parameter | Results | Qualifier | Units | MDL | Dilution Factor | Analyzed | Ву | Batch |
|--------|------------|---------|-----------|-------|-------|--------------------|------------|------------------------|---------|
| 200.7 | Aluminum | 75.3 | | ug/L | 20.0 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Barium | 25.5 | | ug/L | 2.00 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Beryllium | < 5.00 | U | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Calcium | 49500 | | ug/L | 100 | 1 | 10/11/2010 | $\mathbf{s}\mathbf{w}$ | 1010050 |
| 200.7 | Copper | 3.69 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Iron | < 250 | U | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Magnesium | 3190 | | ug/L | 100 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Manganese | 1480 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Potassium | 639 | J | ug/L | 250 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Sodium | 2280 | | ug/L | 250 | . 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Strontium | 509 | | ug/L | 2.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Thallium | < 50.0 | U | ug/L | 20.0 | 1 | 10/11/2010 | SW | 1010050 |
| 200.7 | Titanium | < 20.0 | U | ug/L | 5.00 | 1 | 10/11/2010 | sw | 1010050 |
| 200.7 | Zinc | 338 | | ug/L | 10.0 | 1 | 10/11/2010 | sw | 1010050 |
| 200.8 | Antimony | < 5.00 | U | ug/L | 2.50 | 5 | 10/12/2010 | sv | 1010052 |
| 200.8 | Arsenic | < 10.0 | U | ug/L | 2.50 | 5 | 10/12/2010 | SV | 1010052 |
| 200.8 | Cadmium | 0.640 | J | ug/L | 0.500 | 5 | 10/12/2010 | sv | 1010052 |
| 200.8 | Chromium | < 5.00 | υ | ug/L | 2.50 | 5 | 10/12/2010 | SV | 1010052 |
| 200.8 | Cobalt | < 1.00 | U | ug/L | 0.500 | 5 | 10/12/2010 | SV | 1010052 |
| 200.8 | Lead | < 1.00 | U | ug/L | 0.500 | 5 | 10/12/2010 | SV | 1010052 |
| 200.8 | Molybdenum | 0.984 | J | ug/L | 0.500 | 5 | 10/12/2010 | sv | 1010052 |
| 200.8 | Nickel | < 5.00 | U | ug/L | 2.50 | 5 | 10/12/2010 | sv | 1010052 |
| 200.8 | Selenium | < 5.00 | U | ug/L | 2.50 | 5 | 10/12/2010 | SV | 1010052 |
| 200.8 | Silver · | < 2.50 | U | ug/L | 0.500 | 5 | 10/12/2010 | sv | 1010052 |
| 200.8 | Vanadium | < 10.0 | U | ug/L | 5.00 | 5 | 10/12/2010 | SV | 1010052 |
| 2340B | Hardness | 137 | • | mg/L | · 2 | 1 | 10/11/2010 | sw | 1010050 |

[&]quot;J" Qualifier indicates an estimated value



REGION VIII DATA VALIDATION REPORT **ORGANICS**

| Case/TDD No. | Site D | lame | Operable Unit |
|-----------------------|-------------------|--------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Mini | ing District | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | H35E5 | |

Review Assigned Date: November 23, 2010
December 17, 2010 Data Validator: ____ Lesley Boyd Fred Luck Review Completion Date:_ Report Reviewer:__

| Sample ID | Matrix | Analysis |
|-----------|----------|--|
| H35E5 | Sediment | CLP – Aroclors |
| H35E6 | | |
| H35E7 | | |
| H35E8 | | <u>;</u> |
| H35E9 | | |
| H35F0 | | |
| H35F1 | | |
| H35F2 | | |
| H35F3 | | |
| H35F4 | | • |
| H35F5 | | · |
| H35F6 | | |
| H35F7 | | |
| H35F8 | | And the state of t |
| H35F9 | | |



URS Operating Services, Inc.

| Sample ID | Matrix | Analysis |
|-----------|----------|----------------|
| H35G0 | Sediment | CLP – Aroclors |
| H35G1 | | |
| H35G2 | | |
| H35G3 | | |
| H35G4 | | |

UOS
URS Operating Services, Inc.

DATA QUALITY STATEMENT

| () | Data are ACCEPTABLE according added by the reviewer. | ng to EPA Fu | nctio | nal Guidelines with no qualifiers (flags) |
|-------|---|--------------|-------|--|
| () | Data are UNACCEPTABLE according Data are acceptable with QUALII | | | |
| (X) | Data are acceptable with QUALII | FICATIONS | noted | in review. |
| PO At | ttention Required? Ves | No | Y | If we list the items that require attention: |

ORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to the EPA document "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, SDG No. H35E5, consisted of 20 sediment / mine sediment / soil samples for CLP Aroclor analyses by SOM01.2.

The following tables list data qualifiers added to the data. (Please see Data Qualifier Definitions, attached to the end of this report.)

| Sample Number | Aroclor Compound | Qualifier | Reason For Qualification | Review Section |
|---------------|------------------|-----------|--------------------------------------|-------------------|
| H35G1 | All compounds | UJ | Excessive moisture content in sample | 12 |

1. HOLDING TIMES AND PRESERVATION

All holding times criteria were met. AROCLOR: Yes X No____ All preservation criteria were met. Yes No X AROCLOR: Comments: The soil samples were extracted within 14 days from sample collection and all extracts were analyzed within 40 days from sample extraction. According to the Chain-of-Custody record and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2 °C. When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters. INITIAL INSTRUMENT CALIBRATIONS The multi-component target compound analyses were performed according to method requirements: AROCLOR: Yes X No___ Comments: None. Initial instrument calibrations were performed according to requirements and met the specified control limits listed in the functional guidelines. AROCLOR: Yes_X_ No____ The Mean Retention Times (RTs) for each of the three to five major peaks and Comments: the RT of the surrogates have been determined. The RT Window has been calculated as ±0.07 for each of the three to five Aroclor peaks and ±0.05 and ±0.10 for the surrogates tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), respectively.

At least one chromatogram from each of the Aroclor Standards yields peaks that give reflector deflections between 50-100% of full scale.

The concentrations of the five concentration level standards containing the Aroclors was prepared at the following concentrations 100, 200, 400, 800, and 1600 mg/mL and surrogates at 5.0, 10, 20, 40, and 80 ng/mL for TCX, and 10, 20, 40, 80, and 160 ng/mL for DCB.

2.

The percent relative standard deviations (%RSDs) for the calibration peaks used to quantitate the Aroclors were within 20%. Summary forms and raw data were evaluated.

3. CONTINUING CALIBRATION VERIFICATION

Continuing instrument calibrations were performed according to requirements and met specified control limits listed in the functional guidelines.

AROCLOR: Yes X No____

Comments: Continuing calibration standards were analyzed at the required frequency.

The %Ds were less than or equal to 15% for the opening Aroclor 1016/1260 standards. All %Ds for the closing Aroclor 1016/1260 standards were less than 50%.

No more than 14 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last mid-point concentration of the Aroclor Standards that ends an analytical sequence.

No more than 12 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last sample or blank that is part of an analytical sequence. Summary forms and raw data were evaluated.

4. BLANKS

The laboratory blank analysis was performed according to method requirements and met specified control limits.

AROCLOR: Yes X No___

Comments: A Method blank was extracted along with the field samples at a rate of no more than 20 field samples per method blank and analyzed on the same GC/Electronic Capture Detector (GC/ECD) used for the field samples.

An acceptable instrument blank was run at the completion of the initial calibration sequence. Also an acceptable instrument blank was run at the beginning and ending of the analytical sequence for this sample delivery group.

A sulfur cleanup was not required; therefore a sulfur cleanup blank was not required for this sample delivery group.



5. SURROGATE SPIKES

Surrogate compound recovery analysis was performed according to method requirements and results met specified control limits.

AROCLOR:

Yes X

No____

Comments:

Two surrogate spikes, tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), were added to all samples, including Matrix Spike / Matrix Spike Duplicate (MS/MSDs), Laboratory Control Samples (LCSs), and blanks.

The surrogate percent recoveries (%Rs) were all within the QC limits (30-150%)

for all samples. Summary forms and raw data were evaluated.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSDs)

Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were performed according to method requirements and results met recommended recovery and precision limits.

AROCLOR:

Yes

No X

Comments:

MS/MSD analyses were performed on sample H35G4. The percent recoveries for the Aroclor MS/MSD analyses were within QC limits, however the relative percent differences (RPDs) for the Aroclor MS/MSD analyses were all outside of QC limits. Since the percent recoveries for all of the samples were well within limits and none of the target compounds were detected in any of the field samples no qualification of the data was made. Summary forms and raw data were evaluated.

7. LABORATORY CONTROL SAMPLE (LCS)

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). The percent recoveries for the LCS analyses were within QC limits. Summary forms and raw data were evaluated.

AROCLOR:

Yes X

No____

Comments:

None.

8. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

AROCLOR:

Yes___No_X

Comments:

The SDG shows no indication of EPA Region 8 initiating any additional QA /

QC.

9. GEL PERMEATION CHROMATOGRAPHY (GPC) PERFORMANCE CHECK

The gel permeation chromatography (GPC) check was performed according to requirements and all spike compounds were within the specified quality control limits.

AROCLOR:

Yes X

No

No____

Comments:

The GPC calibration appears acceptable based upon review of the two.

10. TARGET COMPOUND IDENTIFICATION

The sample results were reviewed and all compound identifications were acceptable and met method requirements.

AROCLOR:

Yes X_

Comments:

No problems with the identification of the sample results were found. All retention times were met for the detected results.

None of the target analyses were identified in any of the samples. The sample extract was not diluted for any of the samples.

11. GAS CHROMATOGRAPH / MASS SPECTROMETOR (GC/MS) CONFIRMATION

GC Confirmation of detected Aroclors has been confirmed.

AROCLOR:

Yes___No_X

Comments:

No targeted Aroclors were detected in any of the field samples; therefore GC/MS

confirmation is not required.

12. COMPOUND QUANTITATION AND REPORTED CONTRACT REQUIRED QUANTITATION LIMITS (CRQLs)

The reported quantitative limits and CRQLs are accurate and unqualified

AROCLOR:

Yes___No_X_

Comments:

Compound quantitations, as well as CRQLs were adjusted according to the equations provided in the method.

The percent moisture for sample H35G1 was determined to be 73%, which exceeds the 70.0% level, but is less than 90%. The results for this sample are therefore to be qualified as UJ for each of the target analytes.

13. OTHER COMMENTS NOT ADDRESSED ELSEWHERE

1) Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

ORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

EPA SAMPLE NO.

| | | | |
|------|-----|---|--|
| | | - | |
| Н3 | 5E5 | | |
| | | | |
| | | _ | |

| | | Contract: EPW05026 | | | |
|---|--|--|--|--|--|
| nab rame. | | | | | |
| Lab Code: DAT | AC Case No.: <u>40755</u> Mod. Ref | No.: SDG No.: <u>H35E5</u> | | | |
| Matrix: (SOII | /SED/WATER) SOIL | Lab Sample ID: <u>1030764001</u> | | | |
| Sample wt/vol | Lab File ID: <u>19101109A031,19101109B031</u> | | | | |
| % Moisture: 46. Decanted: (Y/N) N Date Received: 11/03/2010 | | | | | |
| | (Type) SONC | Date Extracted: 11/04/2010 | | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 | | | |
| | ume: 2.0 (uL) GPC Factor: 2.0 | | | | |
| | GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) Y | | | | |
| Acid Cleanup: | | | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q | | | |
| 12674-11-2 | Aroclor-1016 | 61. U | | | |
| 11104-28-2 | Aroclor-1221 | 61. U | | | |
| 11141-16-5 | Aroclor-1232 | 61. U | | | |
| 53469-21-9 | Aroclor-1242 | 61. U | | | |
| 12672-29-6 | Aroclor-1248 | 61. U | | | |
| 11097-69-1 | Aroclor-1254 | 61. U | | | |
| 11096-82-5 | Aroclor-1260 | 61. U | | | |
| | | | | | |

Aroclor-1262

Aroclor-1268

37324-23-5 11100-14-4

> K&A Iliolii

61.

EPA SAMPLE NO.

| H35E6 | |
|-------|--|
| | |

| Lab Name: ALS | Laboratory Group | Contract: | EPW05026 | |
|-----------------------------------|--------------------------------|----------------------------------|--|-------|
| | AC Case No.: 40755 Mod. Ref | No.: | SDG No.: <u>H35E5</u> | |
| Matrix: (SOII | L/SED/WATER) SOIL | Lab Sample | e ID: 1030764002 | |
| Sample wt/vol | L: 30.0 (g/mL) g | Lab File | ID: <u>19101109A032,1910110</u> 9 | 9B032 |
| % Moisture: 16. Decanted: (Y/N) N | | Date Received: <u>11/03/2010</u> | | |
| Extraction: | | Date Extr | acted: <u>11/04/2010</u> | |
| Concentrated | Extract Volume: 5000 (uL) | Date Anal | yzed: <u>11/11/2010</u> | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Diluti | on Factor: 1.0 | |
| | (Y/N) Y pH: 6.8 | Sulfur Cl | eanup: (Y/N) Y | |
| Acid Cleanup: | : (Y/N) <u>Y</u> | | | - |
| CAS NO. | COMPOUND | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | 39. | Ŋ, |
| 11104-28-2 | Aroclor-1221 | | 39. | Ü |
| 11141-16-5 | Aroclor-1232 | | 39. | Ü |
| 53469-21-9 | Aroclor-1242 | | 39. | Ü |
| 12672-29-6 | Aroclor-1248 | | 39. | Ü |
| 11097-69-1 | Aroclor-1254 | | 39. | Ū |
| 11096-82-5 | Aroclor-1260 | | 39. | ט |
| 37324-23-5 | Aroclor-1262 | | 39. | U |
| 11100-14-4 | Arcelor-1268 | | 39. | Ū |

K.A 1/10/11

Lab Name: ALS Laboratory Group

Contract: EPW05026

EPA SAMPLE NO.

| _ | | |
|---|-----------|--|
| | H35E7 | |
| | | |

| Lab Code: DATAC Case No.: 40755 Mod. Ref No.: SDG No.: H35E5 | |
|--|--------------|
| Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 1030764003 | |
| Sample wt/vol: 30.0 (g/mL) g Lab File ID: 19101109A033,19101109 | 3033 |
| % Moisture: 20. Decanted: (Y/N) N Date Received: 11/03/2010 | . |
| Extraction: (Type) SONC Date Extracted: 11/04/2010 | |
| Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/11/2010 | |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0 | |
| | |
| GPC Cleanup. (1/N) 1 p o.o | |
| Acid Cleanup: (Y/N) Y | |
| CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 Aroclor-1016 41. | Ü |
| 11104-28-2 Aroclor-1221 41. | U |
| 11141-16-5 Aroclor-1232 41. | U |
| 53469-21-9 Aroclor-1242 41. | Ü |
| 12672-29-6 Aroclor-1248 41. | U |
| 11.097-69-1 Aroclor-1254 41. | U |
| 11096-82-5 Aroclor-1260 41. | |
| 37324-23-5 Aroclor-1262 41. | U |
| 11100-14-4 Aroclor-1268 | ./ ^ |

K=A 1/10/11

Contract: EPW05026

EPA SAMPLE NO.

| | | _ |
|-------|--|---|
| H35E8 | | |
| | | |

| Lab Name: ALS Laboratory Group Co | | | Contract: EPW05026 | | |
|--|--------------------------------|-----------|---|-----|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref No.: SDG No.: H35E5 | | | | | |
| Matrix: (SOII | J/SED/WATER) SOIL | Lab Sampl | e ID: <u>1030764004</u> | | |
| Sample wt/vol: 30.0 (g/mL) g Lab File ID: 19101109A034,19101109E | | | 09B034 | | |
| % Moisture: 3 | 3. Decanted: (Y/N) N | Date Rece | ived: <u>11/03/2010</u> | | |
| Extraction: | (Type) SONC | Date Extr | acted: 11/04/2010 | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Anal | yzed: <u>11/11/2</u> 010 | | |
| Injection Vol | Lume: 2.0 (uL) GPC Factor: 2.0 | Diluti | on Factor: 1.0 | | |
| | (Y/N) Y pH: 6.8 | | eanup: (Y/N) Y | | |
| Acid Cleanup: (Y/N) Y | | | | | |
| CAS NO. | COMPOUND | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q | |
| 12674-11-2 | Aroclor-1016 | | . 49. | U | |
| 11104-28-2 | Aroclor-1221 | | 49. | Ü | |
| 11141-16-5 | Aroclor-1232 | | 49. | Ü | |
| 53469-21-9 | Aroclor-1242 | | 49. | Ü | |
| 12672-29-6 | Aroclor-1248 | | 49. | U | |
| 11097-69-1 | Aroclor-1254 | | 49. | U | |
| 11096-82-5 | Aroclor-1260 | | 49. | U | |
| 37324-23-5 | Aroclor-1262 | | 49. | Ū · | |
| 11100-14-4 | Aroclor-1268 | | 49. | U | |

16A

EPA SAMPLE NO.

| H35E9 | |
|-------|--|
| | |

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--------------------------------|--|
| | AC Case No.: 40755 Mod. Ref | |
| | L/SED/WATER) SOIL | Lab Sample ID: 1030764005 |
| | l: 30.0 (g/mL) g | Lab File ID: 19101109A035,19101109B035 |
| | | Date Received: <u>11/03/2010</u> |
| | (Type) SONC | Date Extracted: 11/04/2010 |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 |
| • | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| | (Y/N) Y pH: 6.9 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg |
| 12674-11-2 | Aroclor-1016 | 53. U |
| 11104-28-2 | Aroclor-1221 | 53. ບ |
| 11141-16-5 | Aroclor-1232 | 53. U |
| 53469-21-9 | Aroclor-1242 | 53. U |
| 12672-29-6 | Aroclor-1248 | 53. U |
| 11097-69-1 | Aroclor-1254 | 53. U |
| 3100C 00 E | 2 mg = 1 2 6 0 | 53. U |

Aroclor-1268

K=A 1/10/11

EPA SAMPLE NO.

| H35F0 | |
|-------|--|
| | |

| · | |
|--|--|
| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35E5</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030764006</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 19101109A036,19101109B036 |
| % Moisture: 27. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/11/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup: (Y/N) Y | |
| | CONCENTED THE CONTENT HIS THE |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|-----|
| 12674-11-2 | Aroclor-1016 | 46. | Ū |
| 11104-28-2 | Aroclor-1221 | 46. | U |
| 11141-16-5 | Aroclor-1232 | 46. | Ü |
| 53469-21-9 | Aroclor-1242 | 46. | ט |
| 12672-29-6 | Aroclor-1248 | 46. | Ų |
| 11097-69-1 | Aroclor-1254 | 46. | U |
| 11096-82-5 | Aroclor-1260 | 46. | Ū |
| 37324-23-5 | Aroclor-1262 | 46. | ์ับ |
| 11100-14-4 | Aroclor-1268 | 46. | U |

K&A Holl

EPA SAMPLE NO.

| | |
|-------|---|
| H35F1 | • |
| | |

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | |
|--------------------------------|-------------------------------|--|--|--|
| | AC Case No.: 40755 Mod. Ref | | | |
| | | Lab Sample ID: 1030764007 | | |
| Sample wt/vol | : 30.0 (g/mL) g | Lab File ID: 19101109A037,19101109B037 | | |
| | 3 Decanted: (Y/N) N | | | |
| | (Type) SONC | Date Extracted: 11/04/2010 | | |
| | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/11/2010</u> | | |
| | | Dilution Factor: 1.0 | | |
| | | Sulfur Cleanup: (Y/N) Y | | |
| Acid Cleanup: | | | | |
| | · | CONCENTRATION UNITS: | | |
| CAS NO. | COMPOUND | (ug/L or ug/kg) ug/kg Q | | |
| 12674-11-2 | Aroclor-1016 | 43. U | | |
| 11104-28-2 | Aroclor-1221 | 43. U | | |
| 11141-16-5 | Aroclor-1232 | . 43. U | | |
| 53469-21-9 | T-magler-1242 | 43. U | | |
| 12672-29-6 | Aroclor-1248 | 43. U | | |
| | | 43. U | | |
| 11097-69-1 | Aroclor-1254 | 43. U | | |
| 11096-82-5 | Aroclor-1260 | 43. U | | |
| 37324-23-5 | Aroclor-1262 | | | |
| 11100-14-4 | Aroclor-1268 | 43. U | | |

K3/1 1/10/11

EPA SAMPLE NO.

| Lab Name: ALS | Laboratory Group | C | Contract: EPW | 705026 | |
|---------------|----------------------------------|-------------|---------------|--|-------------|
| | AC Case No.: 40755 Mo | | No.: | SDG No.: <u>H35E5</u> | |
| | J/SED/WATER) SOIL | | | D: 1030764008 | |
| | : 30.0 (g/mL) g | | ab File ID: | 19101109A038,1910110 | 9B038 |
| | | | | d: 11/03/2010 | |
| % Moisture: 1 | 7. Decanted: (Y/N) N | | | | |
| Extraction: | (Type) SONC | | | ed: 11/04/2010 | |
| | Extract Volume: 5000 | | | d: 11/11/2010 | |
| Injection Vol | tume: 2.0 (uL) GPC Factor: 2 | .0 | _ Dilution | Factor: 1.0 | |
| | (Y/N) Y pH: 6.8 | | | up: (Y/N) <u>Y</u> | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | | |
| CAS NO. | COMPOUND | | | NCENTRATION UNITS: g/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | | 40. | Ü |
| 11104-28-2 | Aroclor-1221 | | | 40. | U |
| 11141-16-5 | Aroclor-1232 | | | 40. | Ü |
| 53469-21-9 | Aroclor-1242 | | | . 40. | Ü |
| 12672-29-6 | Aroclor-1248 | | | 40. | U |
| 11097-69-1 | Aroclor-1254 | | | 40. | , U |
| | Aroclor-1260 | | | 40. | U |
| | Aroclor-1262 | | | 40. | U |

11100-14-4

Aroclor-1268

K.A Holn

EPA SAMPLE NO.

| | | | - |
|------|-----|------|---|
| нЗ | 5F3 | | |

| Lab Name: ALS Laborato | ory Group | Contract: EPW05026 |
|---------------------------------------|--------------------------|--|
| Lab Code: DATAC | Case No.: 40755 Mod. Re: | f No.: SDG No.: <u>H35E5</u> |
| Matrix: (SOIL/SED/WAT | ER) SOIL | Lab Sample ID: <u>1030764009</u> |
| Sample wt/vol: 30.0 | (g/mL) <u>g</u> | Lab File ID: 19101109A039,19101109B039 |
| % Moisture: 24. | Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SOI | NC | Date Extracted: <u>11/04/2010</u> |
| Concentrated Extract | Volume: 5000 (uL) | Date Analyzed: <u>11/11/2010</u> |
| Injection Volume: 2.0 | (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y | рн: <u>6.7</u> | Sulfur Cleanup: (Y/N) \underline{Y} |
| Acid Cleanup: (Y/N) \underline{Y} | | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg |
|------------|--------------|--|
| 12674-11-2 | Aroclor-1016 | 43. U |
| 11104-28-2 | Aroclor-1221 | 43. U |
| 11141-16-5 | Aroclor-1232 | 43. U |
| 53469-21-9 | Aroclor-1242 | 43. U |
| 12672-29-6 | Aroclor-1248 | 43. U |
| 11097-69-1 | Aroclor-1254 | 43. U |
| 11096-82-5 | Aroclor-1260 | 43. U |
| 37324-23-5 | Aroclor-1262 | 43. U |
| 11100-14-4 | Aroclor-1268 | 43. U |

K&A 1/10/11

EPA SAMPLE NO.

| H35F4 | |
|-------|--|
| | |

| Lab Name: ALS | S Laboratory Group | Contract: | EPW05026 |
|---------------|--------------------------------|-----------|---------------------------------|
| Lab Code: DAT | TAC Case No.: 40755 Mod. Ref | No.: | SDG No.: <u>H35E5</u> |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sampl | e ID: 1030764010 |
| Sample wt/vo | 1: <u>30.0</u> (g/mL) g | Lab File | ID: 19101109A040,19101109B040 |
| % Moisture: 2 | 25. Decanted: (Y/N) N | Date Rece | ived: <u>11/03/2010</u> |
| Extraction: | (Type) SONC | Date Extr | acted: 11/04/2010 |
| Concentrated | Extract Volume: 5000 (uL) | Date Anal | yzed: <u>11/11/2010</u> |
| Injection Vo. | lume: 2.0 (uL) GPC Factor: 2.0 | Diluti | on Factor: 1.0 |
| GPC Cleanup: | (Y/N) <u>Y</u> pH: 6.7 | Sulfur Cl | eanup: (Y/N) Y |
| Acid Cleanup | : (Y/N) <u>Y</u> | | |
| CAS NO. | COMPOUND | | CONCENTRATION UNITS: Q Q Q/kg Q |
| 12674-11-2 | Aroclor-1016 | | 44. Ü |
| 11104-28-2 | Aroclor-1221 | | 44. U |
| 11141-16-5 | Aroclor~1232 | | 44. U |
| 53469-21-9 | Aroclor-1242 | | 44. U |
| 12672-29-6 | Aroclor-1248 | | 44. U |
| 11097-69-1 | Aroclor-1254 | | 44. U |
| 11096-82-5 | Aroclor-1260 | | 44. U |
| 37324-23-5 | Aroclor-1262 | | 44. U |
| 11100-14-4 | Aroclor-1268 | | 44. U |

KA

Lab Name: ALS Laboratory Group

Contract: EPW05026

EPA SAMPLE NO.

| H35F5 | |
|-------|--|
| | |
| | |

| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: | SDG No.: <u>H35E5</u> | |
|---------------|--------------------------------|------------|------------------------------|--------|
| | L/SED/WATER) SOIL | | ID: 1030764011 | |
| | 1: 30.0 (g/mL) g | _ | D: 19101109A041,191011 | 09B041 |
| | 26. Decanted: (Y/N) N | • | ved: 11/03/2010 | - |
| | | | • | |
| Extraction: | (Type) SONC | Date Extra | cted: <u>11/04/2010</u> | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analy | zed: <u>11/11/2010</u> | |
| Injection Vo | lume: 2.0 (uL) GPC Factor: 2.0 | Dilutio | on Factor: 1.0 | |
| | (Y/N) Y pH: 6.7 | | anup: (Y/N) Y | |
| | Acid Cleanup: (Y/N) Y | | | |
| f | | | CONCENTRATION UNITS: | |
| CAS NO. | COMPOUND | | (ug/L or ug/kg) <u>ug/kg</u> | Q |
| 12674-11-2 | Aroclor-1016 | | 45. | Ū |
| 11104-28-2 | Aroclor-1221 | | 45. | Ü |
| 11141-16-5 | Aroclor-1232 | | 45. | Ü |
| 53469-21-9 | Aroclor-1242 | | . 45. | Ü |
| 12672-29-6 | Aroclor-1248 | | 45. | Ü |
| 11097-69-1 | Aroclor-1254 | | 45. | U |
| 11096-82-5 | Aroclor-1260 | | 45. | Ü |
| 37324-23-5 | Aroclor-1262 | | 45. | Ū |
| 11100-14-4 | Aroclor-1268 | | 45. | ប |

K=A 1/10/11

EPA SAMPLE NO.

| - | |
|---|-------|
| | H35F6 |

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--------------------------------|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35E5</u> |
| Matrix: (SOII | L/SED/WATER) SOIL | Lab Sample ID: <u>1030764012</u> |
| Sample wt/vol | L: 30.0 (g/mL) g | Lab File ID: 19101109A042,19101109B042 |
| % Moisture: 2 | 8. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup: | : (Y/N) <u>Y</u> | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: Q Q |
| 12674-11-2 | Aroclor-1016 | 46. U |
| 11104-28-2 | Aroclor-1221 | 46. U |
| 11141-16-5 | Aroclor-1232 | 46. U |
| 53469-21-9 | Aroclor-1242 | 46. U |
| 12672-29-6 | Aroclor-1248 | 46. U |

11097-69-1

11096-82-5

37324-23-5 11100-14-4 Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

1/10/11

Ū

46.

46.

46.

EPA SAMPLE NO.

| H35F7 | |
|-------|--|

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. R | ef No.: SDG No.: <u>H35E5</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: 1030764013 |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 19101109A043,19101109B043 |
| % Moisture: 41. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---------------------|--------------|--|---|
| 10674 11 0 | 3 3016 | (ug/n or ug/kg/ <u>ug/kg</u> 56. | Ü |
| 12674-11-2 | Aroclor-1016 | | |
| 11104-28-2 | Aroclor-1221 | 56. | Ü |
| 11141-16-5 | Aroclor-1232 | 56. | U |
| 53469-21-9 | Aroclor-1242 | 56. | Ü |
| 12672-29-6 | Aroclor-1248 | 56. | Ū |
| 11097-69-1 | Aroclor-1254 | 56. | U |
| 11096-82-5 | Aroclor-1260 | 56. | บ |
| 37324 - 23-5 | Aroclor-1262 | 56. | U |
| 11100-14-4 | Aroclor-1268 | 56. | U |

KJA Woll

Lab Name: ALS Laboratory Group

Contract: EPW05026

EPA SAMPLE NO.

| H35F8 | |
|---------|--|
| 11551.0 | |

| Lab Code: DAT | TAC Case No.: 40755 Mod. Ref | F No.: | SDG No.: H35E5 | |
|---------------|--|------------|-------------------------|-------------|
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample | e ID: 1030764014 | |
| Sample wt/vo | 1: <u>30.0 </u> | Lab File I | D: 19101109A044,1910110 | 09B044 |
| | Decanted: (Y/N) N | Date Recei | ived: 11/03/2010 | |
| _ | (Type) SONC | Date Extra | acted: 11/04/2010 | |
| | Extract Volume: 5000 (uL) | | | |
| | and the second s | | · · | |
| Injection Vo | lume: 2.0 (uL) GPC Factor: 2.0 | Diluti | on Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulfur Cle | eanup: (Y/N) <u>Y</u> | |
| | : (Y/N) <u>Y</u> | | • | |
| | | | CONCENTRATION UNITS: | |
| CAS NO. | COMPOUND | | (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | 56. | Ü |
| 11104-28-2 | Aroclor-1221 | | 56. | U |
| 11141-16-5 | Aroclor-1232 | | 56. | U |
| 53469-21-9 | Aroclor-1242 | | 56. | U |
| 12672-29-6 | Aroclor-1248 | | . 56. | U |
| 11097-69-1 | Aroclor-1254 | | 56. | U |
| 11096-82-5 | Aroclor-1260 | | 56. | Ü |
| 37324-23-5 | Aroclor-1262 | | 56. | U |
| 11100-14-4 | Aroclor-1268 | | 56. | U |

Kol11

Contract: EPW05026

EPA SAMPLE NO.

| | |
|-------|--|
| | |
| H35F9 | |

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|------------------------------------|--|
| Lab Code: DAT | AC Case No.: <u>40755</u> Mod. Ref | No.: SDG No.: <u>H35E5</u> |
| | J/SED/WATER) SOIL | Lab Sample ID: 1030764015 |
| | : 30.0 (g/mL) g | Lab File ID: 19101109A045,19101109B045 |
| - | 8. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| | (Type) SONC | Date Extracted: 11/04/2010 |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 |
| | Lume: 2.0 (uL) GPC Factor: 2.0 | |
| | | Sulfur Cleanup: (Y/N) Y |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulful Cleanup. (1747 1 |
| Acid Cleanup: | : (Y/N) <u>Y</u> | |
| | | CONCENTRATION UNITS: |
| CAS NO. | COMPOUND | (ug/L or ug/kg) ug/kg Q |
| 12674-11-2 | Aroclor-1016 | 46. U |
| 11104-28-2 | Aroclor-1221 | 46. U |
| 11141-16-5 | Aroclor-1232 | 46. U |
| 53469-21-9 | Aroclor-1242 | 46. U |
| 12672-29-6 | Aroclor-1248 | 46. U |
| 11097-69-1 | Aroclor-1254 | 46. U |
| 11096-82-5 | Aroclor-1260 | 46. U |
| 37324-23-5 | Aroclor-1262 | 46. U |
| 11100-14-4 | Aroclor-1268 | 46. U |

KsA Holi

EPA SAMPLE NO.

| H35G0 | |
|-----------|--|
| | |

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--------------------------------|--|
| | AC Case No.: 40755 Mod. Ref | |
| | L/SED/WATER) SOIL | Lab Sample ID: 1030764016 |
| Sample wt/vol | 1: <u>30.0</u> (g/mL) g | Lab File ID: 19101109A046,19101109B046 |
| % Moisture: 2 | 3. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/11/2010</u> |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: | (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup | : (Y/N) <u>Y</u> | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: Q Q |
| 12674-11-2 | Aroclor-1016 | 43. U |
| 11104-28-2 | Aroclor-1221 | 43. U |
| 11141-16-5 | Aroclor-1232 | 43. U |
| 53469-21-9 | Aroclor-1242 | 43. U |
| 12672-29-6 | Aroclor-1248 | 43. U |
| 11097-69-1 | Aroclor-1254 | 43. U |
| 11096-82-5 | Aroclor-1260 | 43. U |
| 37324-23-5 | Aroclor-1262 | 43. U |
| 11100-14-4 | Aroclor-1268 | 43. U |

1/10/11

EPA SAMPLE NO.

| | |
|-------|------|
| H35G1 | |
| | |

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--------------------------------|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35E5</u> |
| Matrix: (SOI) | L/SED/WATER) SOIL | Lab Sample ID: 1030764017 |
| Sample wt/vol | L: <u>30.0 (g/mL) g</u> | Lab File ID: 19101109A047,19101109B047 |
| % Moisture: 7 | 3. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/11/2010</u> |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: | (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup | : (Y/N) <u>Y</u> | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q |
| 12674-11-2 | Aroclor-1016 | 120 U |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q | |
|------------|--------------|--|------------|------|
| 12674-11-2 | Aroclor-1016 | 120 | Ū | U |
| 11104-28-2 | Aroclor-1221 | 120 | ט | UI |
| 11141-16-5 | Aroclor-1232 | 120 | ט |]ひズ |
| 53469-21-9 | Aroclor-1242 | 120 | U | UI |
| 12672-29-6 | Aroclor-1248 | 120 | Ü | UI |
| 11097-69-1 | Aroclor-1254 | 120 | Ū | UI |
| 11096-82-5 | Aroclor-1260 | 120 | , U | UI |
| 37324~23-5 | Aroclor-1262 | 120 | Ü | U |
| 11100-14-4 | Aroclor-1268 | 120 | Ū |]ഗ്പ |

V=A 1/10/11

EPA SAMPLE NO.

| H35G2 | |
|-------|--|
| | |

| Lab Name: ALS | 6 Laboratory Group | _ | Contract: E | EPW05026 | <u></u> |
|---------------|----------------------------|----------|-------------|---|---------|
| Lab Code: DAT | TAC Case No.: 40755 | Mod. Ref | No.: | SDG No.: <u>H35E5</u> | |
| Matrix: (SOI | L/SED/WATER) SOIL | | Lab Sample | ID: 1030764018 | |
| Sample wt/vo | 1: 30.0 (g/mL) g | _ | Lab File I | D: <u>19101109A048,191011</u> | 09B048 |
| % Moisture: 3 | B6. Decanted: (Y/N) N | | Date Recei | ved: <u>11/03/2010</u> | |
| | (Type) SONC | | | cted: 11/04/2010 | |
| | Extract Volume: 5000 | | Date Analy | zed: <u>11/11/2010</u> | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: | 2.0 | Dilutio | on Factor: 1.0 | |
| | (Y/N) Y pH: 6.7 | | | eanup: (Y/N) Y | |
| | : (Y/N) <u>Y</u> | | | | |
| CAS NO. | COMPOUND | | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | | 51. | Ü |
| 11104-28-2 | Aroclor-1221 | | | 51. | Ŭ- |
| 11141-16-5 | Aroclor-1232 | | | 51. | U |
| 53469-21-9 | Aroclor-1242 | | | 51. | . ט |
| 12672-29-6 | Aroclor-1248 | | | 51. | υ |
| 11097-69-1 | Aroclor-1254 | | | 51. | U |
| 11096-82-5 | Arcclor-1260 | | | 51. | Ū |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

Kz A 1/10/11

U

51.

EPA SAMPLE NO.

| Lab Name: AL | S Laboratory Group | Contract: EPWU5U26 | | |
|------------------------|--------------------------------|--|--|--|
| Lab Code: <u>DATAC</u> | | | | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: 1030764019 | | |
| Sample wt/vo | 1: 30.0 (g/mL) g | Lab File ID: 19101109A049,19101109B049 | | |
| | 19. Decanted: (Y/N) N | Date Received: 11/03/2010 | | |
| | (Type) SONC | Date Extracted: 11/04/2010 | | |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 | | |
| | lume: 2.0 (uL) GPC Factor: 2.0 | | | |
| | (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) Y | | |
| Acid Cleanup: (Y/N) Y | | | | |
| | | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | | |
| 12674-11-2 | Aroclor-1016 | 41. U | | |
| 11104-28-2 | Aroclor-1221 | 41. U | | |
| 11141-16-5 | Aroclor-1232 | 41. U | | |
| 53469-21-9 | Aroclor-1242 | 41. U | | |
| 12672-29-6 | Aroclor-1248 | 41. U | | |
| 11097-69-1 | Aroclor-1254 | 41. U | | |
| 11096-82-5 | Aroclor-1260 | 41. U | | |
| 37324-23-5 | Aroclor-1262 | 41. U | | |
| 11100-14-4 | Aroclor-1268 | 41. U | | |

KsA 1/10/11

EPA SAMPLE NO.

| H35G4 | |
|-------|--|
| | |

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 | | |
|-----------------------|--------------------------------|--|--|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | f No.: SDG No.: <u>H35E5</u> | | |
| | L/SED/WATER) SOIL | Lab Sample ID: <u>1030764020</u> | | |
| | L: 30.0 (g/mL) g | Lab File ID: 19101109A050,19101109B050 | | |
| | 7. Decanted: (Y/N) N | Date Received: 11/03/2010 | | |
| | | Date Extracted: 11/04/2010 | | |
| | (Type) SONC | • | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/11/2010 | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) Y | | |
| Acid Cleanup: (Y/N) Y | | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q | | |
| 12674-11-2 | Aroclor-1016 | 45. U | | |
| 11104-28-2 | Aroclor-1221 | 45. U | | |
| 11141-16-5 | Aroclor-1232 | 45. U | | |
| 53469-21-9 | Aroclor-1242 | 45. U | | |
| 12672-29-6 | Aroclor-1248 | 45. U | | |
| 11097-69-1 | Aroclor-1254 | 45. U | | |
| 11096-82-5 | Aroclor-1260 | | | |
| 37324-23-5 | Aroclor-1262 | 45. U | | |

11100-14-4

Aroclor-1268

1/10/11



REGION VIII DATA VALIDATION REPORT ORGANICS

| Case/TDD No. | Site | ame | Opera | ble Unit |
|-----------------------|------------------------------|---------|------------|------------|
| 40755 / 1008-16 | Upper Animas Mining District | | | |
| RPM/OSC Name | | | | |
| Sabrina Forrest | | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory | DPO/Region |
| ALS Laboratory Group | EPW05026 | H35G5 | | |

Review Assigned Date: November 23, 2010 Data Validator: Fred Luck
Review Completion Date: December 2, 2010 Report Reviewer: Lesley Boyd

| Sample ID | Matrix | Analysis |
|-----------|---------------|----------------|
| H35G5 | Sediment | CLP – Aroclors |
| H35G6 | | |
| H35G7 | | |
| H35G8 | | |
| H35G9 | | |
| Н35Н0 | | |
| Н35Н1 | | · |
| H35H2 | | |
| Н35Н3 | | · |
| H35H4 | | |
| Н35Н5 | • | |
| Н35Н6 | | |
| H35H8 | Mine Sediment | |
| H35H9 | | |
| H35J0 | Sediment | |



URS Operating Services, Inc.

| Sample ID | Matrix | - Analysis |
|-----------|----------------|----------------|
| H35J2 | Mine Sediment | CLP – Aroclors |
| H35J3 | Sediment | |
| H35J4 | Soil - Surface | |
| H35J5 | | |
| H35J6 | | |

DATA QUALITY STATEMENT

| () | added by the reviewer. | C | | nal Guidelines with no qualifiers (flags) |
|-------|------------------------------|------------------|-------|--|
| () | Data are UNACCEPTABLE a | according to EPA | Func | ctional Guidelines. |
| (X) | Data are acceptable with QUA | LIFICATIONS | noted | in review. |
| | | | | · |
| PO At | tention Required? Ves | No | X | If yes, list the items that require attention. |

ORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to the EPA document "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, SDG No. H35G5, consisted of 20 sediment / mine sediment / soil samples for CLP Aroclor analyses by SOM01.2.

The following tables list data qualifiers added to the data. (Please see Data Qualifier Definitions, attached to the end of this report.)

| Sample Number | Aroclor Compound | Qualifier | Reason For Qualification | Review Section |
|---------------|------------------|-----------|--------------------------------------|-------------------|
| H35J3 | All compounds | UJ | Excessive moisture content in sample | 12 |



1. HOLDING TIMES AND PRESERVATION

(DCB), respectively.

| All holding tim | nes criteria were met. |
|-----------------------------|--|
| AROCLOR: | Yes_X_ No |
| All preservation | n criteria were met. |
| AROCLOR: | Yes No_X_ |
| Comments: | The soil samples were extracted within 14 days from sample collection and all extracts were analyzed within 40 days from sample extraction. |
| | According to the Chain-of-Custody record and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2 °C. When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters. |
| INITIAL INST | TRUMENT CALIBRATIONS |
| The multi-con requirements: | nponent target compound analyses were performed according to method |
| AROCLOR: | Yes_X_ No |
| Comments: | None. |
| | |
| | ent calibrations were performed according to requirements and met the specified sted in the functional guidelines. |
| AROCLOR: | Yes_X_ No |
| Comments: | The Mean Retention Times (RTs) for each of the three to five major peaks and the RT of the surrogates have been determined. The RT Window has been calculated as ± 0.07 for each of the three to five Aroclor peaks and ± 0.05 and ± 0.10 for the surrogates tetrachloro-m-xylene (TCX) and decachlorobiphenyl |

At least one chromatogram from each of the Aroclor Standards yields peaks that give reflector deflections between 50-100% of full scale.

The concentrations of the five concentration level standards containing the Aroclors was prepared at the following concentrations 100, 200, 400, 800, and 1600 mg/mL and surrogates at 5.0, 10, 20, 40, and 80 ng/mL for TCX, and 10, 20, 40, 80, and 160 ng/mL for DCB.

The percent relative standard deviations (%RSDs) for the calibration peaks used to quantitate the Aroclors were within 20%. Summary forms and raw data were evaluated.

3. CONTINUING CALIBRATION VERIFICATION

Continuing instrument calibrations were performed according to requirements and met specified control limits listed in the functional guidelines.

AROCLOR: Yes

Yes_X_

No___

Comments:

Continuing calibration standards were analyzed at the required frequency.

The %Ds were less than or equal to 15% for the opening Aroclor 1016/1260 standards. All %Ds for the closing Aroclor 1016/1260 standards were less than 50%.

No more than 14 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last mid-point concentration of the Aroclor Standards that ends an analytical sequence.

No more than 12 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last sample or blank that is part of an analytical sequence. Summary forms and raw data were evaluated.

4. BLANKS

The laboratory blank analysis was performed according to method requirements and met specified control limits.

AROCLOR:

Yes_X

No

Comments:

A Method blank was extracted along with the field samples at a rate of no more than 20 field samples per method blank and analyzed on the same GC/Electronic Capture Detector (GC/ECD) used for the field samples.

An acceptable instrument blank was run at the completion of the initial calibration sequence. Also an acceptable instrument blank was run at the beginning and ending of the analytical sequence for this sample delivery group.

A sulfur cleanup was not required; therefore a sulfur cleanup blank was not required for this sample delivery group.



5. SURROGATE SPIKES

Surrogate compound recovery analysis was performed according to method requirements and results met specified control limits.

AROCLOR:

Yes X

No

Comments:

Two surrogate spikes, tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), were added to all samples, including Matrix Spike / Matrix Spike Duplicate (MS/MSDs), Laboratory Control Samples (LCSs), and blanks.

The surrogate percent recoveries (%Rs) were all within the QC limits (30-150%) for all samples. Summary forms and raw data were evaluated.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSDs)

Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were performed according to method requirements and results met recommended recovery and precision limits.

AROCLOR:

Yes X

No

Comments:

MS/MSD analyses were performed on sample H35G6. The percent recoveries and relative percent differences (RPDs) for the Aroclor MS/MSD analyses were within QC limits. Summary forms and raw data were evaluated.

7. LABORATORY CONTROL SAMPLE (LCS)

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). The percent recoveries for the LCS analyses were within QC limits. Summary forms and raw data were evaluated.

AROCLOR:

Yes_X_

No___

Comments:

None.

8. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

AROCLOR:

Yes No X

Comments:

The SDG shows no indication of EPA Region 8 initiating any additional QA /

QC.



9. GEL PERMEATION CHROMATOGRAPHY (GPC) PERFORMANCE CHECK

The gel permeation chromatography (GPC) check was performed according to requirements and all spike compounds were within the specified quality control limits.

AROCLOR:

Yes X

No

Comments:

The GPC calibration appears acceptable based upon review of the two.

10. TARGET COMPOUND IDENTIFICATION

The sample results were reviewed and all compound identifications were acceptable and met method requirements.

AROCLOR:

Yes X

No

Comments:

No problems with the identification of the sample results were found. All

retention times were met for the detected results.

None of the target analyses were identified in any of the samples. The sample

extract was not diluted for any of the samples.

11. GAS CHROMATOGRAPH / MASS SPECTROMETOR (GC/MS) CONFIRMATION

GC Confirmation of detected Aroclors has been confirmed

AROCLOR:

Yes No X

Comments:

No targeted Aroclors were detected in any of the field samples; therefore GC/MS

confirmation is not required.

12. COMPOUND QUANTITATION AND REPORTED CONTRACT REQUIRED QUANTITATION LIMITS (CRQLs)

The reported quantitative limits and CRQLs are accurate and unqualified

AROCLOR:

Yes No X

Comments:

Compound quantitations, as well as CRQLs were adjusted according to the

equations provided in the method.

The percent moisture for sample H35J3 was determined to be 81%, which exceeds the 70.0% level, but is less than 90%. The results for this sample are

therefore to be qualified as UJ for each of the target analytes.



13. OTHER COMMENTS NOT ADDRESSED ELSEWHERE

- 1) An unnumbered page was located immediately following page 75. This is the first chromatogram for sample H35J6.
- 2) Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill



ORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- UJThe reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
- NJ Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- Ú The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

EPA SAMPLE NO.

| rap Name: Arg | Laboratory Group | Contract: EPWU5UZ6 | |
|---------------|--|--|--|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: 1030765001 | |
| Sample wt/vo. | 1: <u>30.0</u> (g/mL) g | Lab File ID: 31101109A028,31101109B028 | |
| % Moisture: 1 | 7. Decanted: (Y/N) N | Date Received: 11/03/2010 | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/10/2010</u> | |
| Injection Vo | lume: <u>2.0</u> (uL) GPC Factor: <u>2.0</u> | Dilution Factor: 1.0 | |
| GPC Cleanup: | GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q | |
| 12674-11-2 | Aroclor-1016 | 40. U | |
| 11104-28-2 | Aroclor-1221 | 40. U | |
| 11141-16-5 | Aroclor-1232 | 40. U | |
| 53469-21-9 | Aroclor-1242 | 40. U | |
| 12672-29-6 | Aroclor-1248 | 40. U | |
| 11097-69-1 | Aroclor-1254 | 40. U | |
| 11096-82-5 | Aroclor-1260 | 40. U | |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

KA 1/10/11

40.

EPA SAMPLE NO.

| H35G6 | |
|-------|--|
| | |

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | |
|--------------------------------|--|--|--------------|--|
| Lab Code: DAT | <u>PAC</u> Case No.: <u>40755</u> Mod. Ref | No.: SDG No.: <u>H35G5</u> | | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: <u>1030765002</u> | | |
| Sample wt/vol | 1: <u>30.0</u> (g/mL) <u>g</u> | Lab File ID: 31101109A029,311011 | 09B029 | |
| % Moisture: 2 | Programmed: (Y/N) N | Date Received: <u>11/03/2010</u> | . | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | | |
| | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/10/2010</u> | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup | : (Y/N) <u>Y</u> | • | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q | |
| 12674-11-2 | Aroclor-1016 | 45. | Ū | |
| 11104-28-2 | Aroclor-1221 | 45. | Ü | |
| 11141-16-5 | Aroclor-1232 | 45. | Ü | |
| 53469-21-9 | Aroclor-1242 | 45. | Ü | |
| 12672-29-6 | Aroclor-1248 | 45. | Ū | |
| 11097-69-1 | Aroclor-1254 | 45. | Ü | |
| 11096-82-5 | Aroclor-1260 | 45. | Ü | |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

1/10/11

EPA SAMPLE NO.

| U35C7 | |
|-------|--|
| H35G7 | |

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | |
|--------------------------------|--------------------------------|--------------------|---|---------------------------------------|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: | SDG No.: <u>H35G5</u> | · · · · · · · · · · · · · · · · · · · |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sampl | e ID: 1030765005 | |
| Sample wt/vo | 1: <u>30.0</u> (g/mL) <u>g</u> | Lab File | ID: 31101109A032,3110110 | 09B032 |
| % Moisture: 6 | Decanted: (Y/N) N | Date Rece | ived: 11/03/2010 | |
| Extraction: | (Type) SONC | Date Extr | acted: 11/04/2010 | |
| Concentrated | Extract Volume: 5000 (uL) | Date Anal | yzed: <u>11/10/2010</u> | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Diluti | ion Factor: 1.0 | |
| GPC Cleanup: | (Y/N) <u>Y</u> pH: 6.6 | Sulfur Cl | eanup: (Y/N) N | · |
| Acid Cleanup | : (Y/N) <u>Y</u> | - | | |
| CAS NO. | COMPOUND | 1 | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Ω. |
| 12674-11-2 | Aroclor-1016 | | 87. | Ū |
| 11104-28-2 | Aroclor-1221 | | 87. | Ū |
| 11141-16-5 | Aroclor-1232 | | 87. | Ū |
| 53469-21-9 | Aroclor-1242 | | 87. | U |
| 12672-29-6 | Aroclor-1248 | | 87. | U |
| 11097-69-1 | Aroclor-1254 | | 87. | U |

11096-82-5

37324-23-5

11100-14-4

Aroclor-1260

Aroclor-1262

Aroclor-1268

KaA

U

Ü

87.

87.

EPA SAMPLE NO.

| H35G8 |
|-------|

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030765006</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 31101109A033,31101109B033 |
| % Moisture: 22. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: 11/10/2010 |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |
| | CONCENTRATION UNITS: |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|-----|
| 12674-11-2 | Aroclor-1016 | 42. | Ü |
| 11104-28-2 | Aroclor-1221 | 42. | Ü |
| 11141-16-5 | Aroclor-1232 | 42. | U |
| 53469-21-9 | Aroclor-1242 | 42. | Ü |
| 12672-29-6 | Aroclor-1248 | 42. | Ü |
| 11097-69-1 | Aroclor-1254 | 42. | Ü . |
| 11096-82-5 | Aroclor-1260 | 42. | Ü |
| 37324-23-5 | Aroclor-1262 | 42. | Ü |
| 11100-14-4 | Aroclor-1268 | 42. | Ū |

1/10/11

EPA SAMPLE NO.

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|------------------------------------|--|
| Lab Code: DATAC Case No.: 40755 | Mod. Ref No.: SDG No.: H35G5 |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030765007</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 31101109A034,31101109B034 |
| % Moisture: 55. Decanted: (Y/N | N) N Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC | Date Extracted: <u>11/04/2010</u> |
| Concentrated Extract Volume: 5000 | (uL) Date Analyzed: <u>11/10/2010</u> |
| Injection Volume: 2.0 (uL) GPC Fac | tor: 2.0 Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |
| CAS NO. COMPOUND | CONCENTRATION UNITS: |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: | . 0 |
|------------|--------------|-----------------------|-----|
| | | (ug/L or ug/kg) ug/kg | ~ |
| 12674-11-2 | Aroclor-1016 | 74. | υ |
| 11104-28-2 | Aroclor-1221 | 74. | Ū, |
| 11141-16-5 | Aroclor-1232 | 74. | Ū |
| 53469-21-9 | Aroclor-1242 | 74. | Ū |
| 12672-29-6 | Aroclor-1248 | 74. | Ū |
| 11097-69-1 | Aroclor-1254 | 74. | Ū |
| 11096-82-5 | Aroclor-1260 | 74. | Ū |
| 37324-23-5 | Aroclor-1262 | 74. | Ū |
| 11100-14-4 | Aroclor-1268 | 74. | ΰ |

Upoly

EPA SAMPLE NO.

| Н35Н0 | |
|-------|--|

| Lab Name: ALS | S Laboratory Group | | Contract: | EPW05026 | | |
|-----------------------------------|----------------------------|----------|---------------------------|--|----------------|--|
| Lab Code: DAT | CAC Case No.: 40755 | Mod. Ref | No.: | SDG No.: <u>H35G5</u> | | |
| Matrix: (SOI | L/SED/WATER) SOIL | - | | | | |
| | 1:30.0 (g/mL) g | | Lab File I | d: 31101109A035,3110110 | <u>0</u> 9B035 | |
| % Moisture: 44. Decanted: (Y/N) N | | | Date Received: 11/03/2010 | | | |
| Extraction: | (Type) SONC | _ | Date Extra | acted: <u>11/04/2010</u> | | |
| • | Extract Volume: 5000 | | Date Analy | yzed: <u>11/10/2010</u> | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: | : 2.0 | Diluti | on Factor: 1.0 | | |
| GPC Cleanup: | (Y/N) <u>Y</u> pH: 6.6 | _ | Sulfur Cle | eanup: (Y/N) N | | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | | | |
| CAS NO. | COMPOUND | | 1 | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Ω | |
| 12674-11-2 | Aroclor-1016 | | | 58. | U | |
| 11104-28-2 | Aroclor-1221 | | | 58. | U | |
| 11141-16-5 | Aroclor-1232 | | | 58. | U | |
| 53469-21-9 | Aroclor-1242 | | | 58. | U | |
| 12672-29-6 | Aroclor-1248 | | | 58. | Ū | |
| 11097-69-1 | Aroclor-1254 | | | 58. | υ | |
| 11096-82-5 | Aroclor-1260 | | | 58. | Ü | |
| 25224 22 5 | | | | | | |

1/2/A 1/10/11

EPA SAMPLE NO.

| H3 | 5 | н1 | |
|----|---|----|--|

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | | |
|--------------------------------|----------------------------|--------------------|------------|--|--------|
| Lab Code: DAT | 'AC Case No.: 40755 | Mod. Ref | No.: | SDG No.: <u>H35G5</u> | |
| Matrix: (SOI) | L/SED/WATER) SOIL | | Lab Sample | ID: 1030765009 | |
| Sample wt/vol | l: <u>30.0</u> (g/mL) g | | Lab File I | D: 31101109A036,311011 | 09B036 |
| % Moisture: 3 | 6. Decanted: (Y/N) N | | Date Recei | ved: 11/03/2010 | |
| Extraction: | (Type) SONC | | Date Extra | acted: 11/04/2010 | |
| | Extract Volume: 5000 | | Date Analy | zed: 11/10/2010 | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: | 2.0 | Dilutio | on Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | _ | Sulfur Cle | eanup: (Y/N) N | |
| Acid Cleanup | • | | | | |
| CAS NO. | COMPOUND | | - 1 | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | | 52. | Ū |
| 11104-28-2 | Aroclor-1221 | | | 52. | U |
| 11141-16-5 | Aroclor-1232 | | | 52. | U |
| 53469-21-9 | Aroclor-1242 | | 1 | 52. | Ū |
| 12672-29-6 | Aroclor-1248 | | | 52. | U |
| 11097-69-1 | Aroclor-1254 | | | 52. | Ü |

11096-82-5

37324-23-5

11100-14-4

Aroclor-1260

Aroclor-1262

Aroclor-1268

Kz/A 1/18/11

U

52.

52.

EPA SAMPLE NO.

| H35H2 | |
|-------|--|

| rap Mame: And | s Laboratory Group | Contract. EFW03020 | | |
|-------------------------------|---------------------------------------|--|--|--|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | f No.: SDG No.: <u>H35G5</u> | | |
| Matrix: (SOIL/SED/WATER) SOIL | | Lab Sample ID: <u>1030765010</u> | | |
| Sample wt/vo | 1: <u>30.0</u> (g/mL) <u>g</u> | Lab File ID: 31101109A037,31101109B037 | | |
| % Moisture: 6 | Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> | | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/10/2010 | | |
| | lume: 2.0 (uL) GPC Factor: 2.0 | | | |
| | (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup: (Y/N) Y | | | | |
| | · · · · · · · · · · · · · · · · · · · | CONCENTRATION UNITS: | | |
| CAS NO. | COMPOUND | (ug/L or ug/kg) ug/kg Q | | |
| 12674-11-2 | Aroclor-1016 | 82. U | | |
| 11104-28-2 | Aroclor-1221 | 82. U | | |
| 11141-16-5 | Aroclor-1232 | 82. U | | |
| 53469-21-9 | Aroclor-1242 | . 82. U | | |
| 12672-29-6 | Aroclor-1248 | 82. U | | |
| 11097-69-1 | Aroclor-1254 | 82. U | | |
| 11096-82-5 | Aroclor-1260 | 82. U | | |
| 37324-23-5 | Aroclor-1262 | 82. U | | |
| 11100-14-4 | Aroclor-1268 | 82. U | | |
| | | · · · · · | | |

4 ولا ا ا/ه/ا

EPA SAMPLE NO.

| H35H3 | |
|-------|--|

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | |
|--|--------------------------------|--|--|--|
| Lab Code: DAT | PAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> | | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: 1030765011 | | |
| Sample wt/vo | 1: 30.0 (g/mL) g | Lab File TD: 31101109A038,31101109B038 | | |
| % Moisture: 2 | 24. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> | | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/10/2010</u> | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | |
| GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N | | | | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | | |
| 12674-11-2 | Aroclor-1016 | 44. U | | |
| 11104-28-2 | Aroclor-1221 | 44. U | | |
| 11141-16-5 | Aroclor-1232 | 44. U | | |
| 53469-21-9 | Aroclor-1242 | 44. U | | |
| 12672-29-6 | Aroclor-1248 | 44. U | | |
| 11097-69-1 | Aroclor-1254 | 44. U | | |
| 11096-82-5 | Aroclor-1260 | 44. U | | |
| 37324-23-5 | Aroclor-1262 | 44. U | | |
| 11100-14-4 | Aroclor-1268 | 44. U | | |

1/0/11

EPA SAMPLE NO.

| н35н4 |
|-------|

| Lab Name: ALS | G Laboratory Group | Contract: | EPW05026 | | |
|-------------------------------|--------------------------------|---------------------------|----------------------------|-------|--|
| Lab Code: DAT | <u> </u> | No.: | SDG No.: <u>H35G5</u> | | |
| Matrix: (SOIL/SED/WATER) SOIL | | Lab Sample ID: 1030765012 | | | |
| | 1: 30.0 (g/mL) g | Lab File | ID: 31101109A039,3110110 | 98039 | |
| | 04. Decanted: (Y/N) N | Date Rece | ived: 11/03/2010 | | |
| | (Type) SONC | Date Extr | Date Extracted: 11/04/2010 | | |
| | Extract Volume: 5000 (uL) | | yzed: 11/10/2010 | | |
| | lume: 2.0 (uL) GPC Factor: 2.0 | | | | |
| | | | eanup: (Y/N) N | | |
| | | | | | |
| ACIG Cleanup | : (Y/N) <u>Y</u> | | | | |
| CAS NO. | COMPOUND | | CONCENTRATION UNITS: | Ω | |
| CAD NO. | CONTOUND | | (ug/L or ug/kg) ug/kg | ~ | |
| 12674-11 - 2 | Aroclor-1016 | | 71. | U | |
| 11104-28-2 | Aroclor-1221 | | 71. | U | |
| 11141-16-5 | Aroclor-1232 | | 71. | Ū | |
| 53469-21-9 | Aroclor-1242 | | 71. | Ü | |
| 12672-29-6 | Aroclor-1248 | | 71. | Ü | |
| 11097-69-1 | Aroclor-1254 | | 71. | U | |
| 11096-82-5 | Aroclor-1260 | | 71. | Ü | |
| 37324-23-5 | Aroclor-1262 | | 71. | Ü | |
| 31100-14-4 | Aroclor-1268 | | 71 | гт | |

1/10/11

EPA SAMPLE NO.

| н35н5 | |
|-------|--|

| nan Name: ALC | Panoracory Group | Contract: EPW03026 | | | |
|---|---------------------------|----------------------|--------------|--------|--|
| Lab Code: <u>DATAC</u> | | | | | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: 10307 | 65013 | | |
| | 1: 30.0 (g/mL) g | Lab File ID: 3110110 | 9A040,311011 | 09B040 | |
| | 15. Decanted: (Y/N) N | Date Received: 11/03 | | | |
| | (Type) SONC | Date Extracted: 11/0 | | | |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/10 | | ,, | |
| | | | | • | |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0 GPC Cleanup: (Y/N) Y PH: 6.7 Sulfur Cleanup: (Y/N) N | | | | | |
| Acid Cleanup: (Y/N) Y | | | | | |
| CAS NO. | COMPOUND | j | TION UNITS: | Q | |
| 12674-11-2 | Aroclor-1016 | | 60. | Ū | |
| 11104-28-2 | Aroclor-1221 | 1980 | 60. | Ü | |
| 11141-16-5 | Aroclor-1232 | | 60. | Ū | |
| 53469-21-9 | Aroclor-1242 | | 60. | Ü | |
| 12672-29-6 | Aroclor-1248 | | 60. | U | |
| 11097-69-1 | Aroclor-1254 | | 60. | Ü | |
| 11096-82-5 | Aroclor-1260 | | 60. | U | |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

123/A 1/10/11

60.

EPA SAMPLE NO.

н35н6

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 | | |
|-----------------------|-----------------------------|--|--|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> | | |
| Matrix: (SOI) | L/SED/WATER) SOIL | Lab Sample ID: 1030765014 | | |
| Sample wt/vol | L: 30.0 (g/mL) g | Lab File ID: 31101109A041,31101109B041 | | |
| % Moisture: 5 | 2. Decanted: (Y/N) N | Date Received: 11/03/2010 | | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | | |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/10/2010 | | |
| | • | Dilution Factor: 1.0 | | |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup: (Y/N) Y | | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q | | |
| 12674-11-2 | Aroclor-1016 | 69. U | | |
| 11104-28-2 | Aroclor-1221 | 69. U | | |
| 11141-16-5 | Aroclor-1232 | . 69. บ | | |
| 53469-21-9 | Aroclor-1242 | 69. U | | |
| 12672-29-6 | Aroclor-1248 | 69. U | | |
| 11097-69-1 | Aroclor-1254 | 69. U | | |
| 11096-82-5 | Aroclor-1260 | 69. U | | |
| 37324-23-5 | Aroclor-1262 | 69. U | | |

11100-14-4

Aroclor-1268

16/1 1/10/11

EPA SAMPLE NO.

82.

82.

82.

82.

82.

82.

82.

82.

| Lab Name: ALS Laboratory Group | | | Contract: EPW05026 | | | |
|--------------------------------|------------------|-----------------------|--------------------|-----------|--|-------|
| Lab Code: DAT | r <u>AC</u> Ca | ase No.: <u>40755</u> | Mod. Ref | No.: | SDG No.: <u>H35G5</u> | |
| Matrix: (SOI) | L/SED/WATER) |) SOIL | | Lab Sampl | e ID: <u>1030765015</u> | |
| Sample wt/vol | 1: 30.0 | (g/mL) <u>g</u> | <u> </u> | Lab File | ID: 31101109A042,3110110 | 9B042 |
| % Moisture: 6 | 50. D | Decanted: (Y/N) N | | Date Rece | ived: 11/03/2010 | |
| Extraction: | (Type) SONC | | | Date Extr | racted: 11/04/2010 | |
| Concentrated | Extract Vol | lume: <u>5000</u> | (uL) | Date Anal | yzed: <u>11/10/2010</u> | |
| Injection Vol | lume: <u>2.0</u> | _(uL) GPC Factor | : 2.0 | Diluti | ion Factor: 1.0 | |
| GPC Cleanup: | (Y/N) <u>Y</u> | pH: <u>6.6</u> | _ | Sulfur Cl | eanup: (Y/N) N | |
| Acid Cleanup: (Y/N) Y | | | | | | |
| CAS NO. | COMPOUND | | | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-101 | 16 | | | 82. | Ū |

11104-28-2

11141-16-5

53469-21-9

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1221

Aroclor-1232

Aroclor-1242

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

123A Woln

Ū

U

U

Ū

U

U

EPA SAMPLE NO.

| | _ |
|-------|---|
| н35н9 | |

| Lab Name: ALS | Laboratory Group | _ | Contract: | EPWU5U26 | · |
|---------------|-------------------------------|----------|------------|--|--------|
| Lab Code: DAT | AC Case No.: 40755 N | 1od. Ref | No.: | SDG No.: H35G5 | |
| Matrix: (SOI) | L/SED/WATER) SOIL | | Lab Sample | iD: 1030765016 | |
| Sample wt/vo | L: 30.0 (g/mL) g | _ | Lab File I | ID: 31101109A043,3110110 |)9B043 |
| % Moisture: 6 | 7. Decanted: (Y/N) N | | Date Recei | ved: 11/03/2010 | |
| Extraction: | (Type) SONC | | Date Extra | acted: 11/04/2010 | |
| Concentrated | Extract Volume: 5000 | _ (uL) | Date Analy | /zed: <u>11/10/2010</u> | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: | 2.0 | Diluti | on Factor: 1.0 | |
| GPC Cleanup: | (Y/N) <u>Y</u> pH: <u>6.6</u> | | Sulfur Cle | eanup: (Y/N) N | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | | |
| CAS NO. | COMPOUND | | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | | 99. | ָט |
| 11104-28-2 | Aroclor-1221 | | | 99. | Ū. |
| 11141-16-5 | Aroclor-1232 | | | 99. | Ū |
| 53469-21-9 | Aroclor-1242 | | | 99. | U |
| 12672-29-6 | Aroclor-1248 | | | 99. | Ū |
| 11097-69-1 | Aroclor-1254 | | | 99. | U |
| 11096-82-5 | Aroclor-1260 | | | 99. | Ū |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

1/2 A

99.

Contract: EPW05026

EPA SAMPLE NO.

| | | _ |
|---|-------|-------|
| ٠ | Н35J0 | |

| Lab Name: ALS Laboratory Group | | | Contract: EPW05026 | | | |
|--------------------------------|--|---------|--------------------|--|--------|--|
| Lab Code: DAT | AC Case No.: 40755 M | od. Ref | No.: | SDG No.: <u>H35G5</u> | | |
| Matrix: (SOI | L/SED/WATER) SOIL | - | Lab Sampl | e ID: 1030765017 | | |
| Sample wt/vo | L: 30.0 (g/mL) g | - | Lab File | ID: 31101109A044,311011 | 09B044 | |
| % Moisture: 2 | 1. Decanted: (Y/N) N | | Date Rece | ived: <u>11/03/2010</u> | | |
| Extraction: | (Type) SONC | | Date Extr | acted: <u>11/04/2010</u> | | |
| Concentrated | Extract Volume: 5000 | (uL) | Date Anal | yzed: <u>11/10/2010</u> | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: | 2.0 | Diluti | on Factor: 1.0 | | |
| GPC Cleanup: | GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) N | | | | | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | | | |
| CAS NO. | COMPOUND | ert , | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q | |
| 12674-11-2 | Aroclor-1016 | | | 42. | Ū | |
| 11104-28-2 | Aroclor-1221 | | | 42. | ט | |
| 11141-16-5 | Aroclor-1232 | | | 42. | U | |
| 53469-21-9 | Aroclor-1242 | | | 42. | Ü | |
| 12672-29-6 | Aroclor-1248 | | | 42. | U | |
| 11097-69-1 | Aroclor-1254 | | | 42. | υ | |
| 11096-82-5 | Aroclor-1260 | | | 42. | Ü | |
| 37324-23-5 | Aroclor-1262 | | | 42. | U | |
| 11100-14-4 | Aroclor-1268 | | | 42. | U | |

Violis

EPA SAMPLE NO.

| н35J2 | |
|--------|--|
| 113302 | |

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | | |
|--------------------------------|--|--------------------|------------|--|--------|
| Lab Code: DAT | TAC Case No.: 40755 Mod. Ref No.: SDG No.: H35G5 | | | | |
| Matrix: (SOI | L/SED/WATER) SOIL | _ | Lab Sample | D: 1030765018 | |
| Sample wt/vo. | l: 30.0 (g/mL) g | _ | Lab File I | D: 31101109A045,311011 | 09B045 |
| % Moisture: 6 | 3. Decanted: (Y/N) N | | Date Recei | ved: 11/03/2010 | |
| Extraction: | (Type) SONC | <u>.</u> | Date Extra | acted: 11/04/2010 | |
| | Extract Volume: 5000 | | Date Analy | /zed: <u>11/10/2010</u> | |
| | lume: 2.0 (uL) GPC Factor: | | | | |
| GPC Cleanup: | GPC Cleanup: (Y/N) Y pH: 6.6 Sulfur Cleanup: (Y/N) N | | | | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | | |
| CAS NO. | COMPOUND | | 1 | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | | 89. | Ū |
| 11104-28-2 | Aroclor-1221 | | | 89. | ט |
| 11141-16-5 | Aroclor-1232 | | | 89. | Ü |
| 53469-21-9 | Aroclor-1242 | | | 89. | Ü |
| 12672-29-6 | Aroclor-1248 | | | 89. | · U |
| 11097-69-1 | Aroclor-1254 | | | 89. | Ū |
| 11096-82-5 | Aroclor-1260 | - | - | 89. | U |
| 37324-23-5 | Aroclor-1262 | | - | 89. | ΰ |
| 11100-14-4 | Aroclor-1268 | | | 89. | υ |

KsA Holi

EPA SAMPLE NO.

| н35J3 |
|-------|
|-------|

| Lab Name: ALS Laboratory Group | Contract: EPW05026 | | |
|--|--|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> | | |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: 1030765019 | | |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 31101109A046,31101109B046 | | |
| % Moisture: 81. Decanted: (Y/N) N | Date Received: 11/03/2010 | | |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 | | |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/10/2010</u> | | |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | |
| GPC Cleanup: (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup: (Y/N) Y | | | |
| | | | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |] |
|------------|--------------|--|---|--------|
| 12674-11-2 | Aroclor-1016 | 170 | Ü | زن[|
| 11104-28-2 | Aroclor-1221 | 170 | Ü | IJ |
| 11141-16-5 | Aroclor-1232 | 170 | Ū | إنا |
| 53469-21-9 | Aroclor-1242 | 170 | U | ں [|
| 12672-29-6 | Aroclor-1248 | 170 | Ū |]v: |
| 11097-69-1 | Aroclor-1254 | 170 | Ü |] ဟု |
| 11096-82-5 | Aroclor-1260 | 170 | ט | |
| 37324-23-5 | Aroclor-1262 | 170 | U | ين[|
| 11100-14-4 | Aroclor-1268 | 170 | Ū | \cup |

K3A

EPA SAMPLE NO.

| Н35Ј4 | |
|-------|--|

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 | | | |
|---------------|--|--|---------|--|--|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> | | | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: <u>1030765020</u> | _ | | |
| Sample wt/vo | l: <u>30.0</u> (g/mL) <u>g</u> | Lab File ID: 31101109A047,31101109B047 | <u></u> | | |
| % Moisture: 1 | 5. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> | | | |
| Extraction: | (Type) SONC | Date Extracted: <u>11/04/2010</u> | | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/10/2010</u> | | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | | |
| GPC Cleanup: | GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N | | | | |
| Acid Cleanup | ŧ | | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | | | |
| 12674-11-2 | Aroclor-1016 | 39. U | | | |
| 11104-28-2 | Aroclor-1221 . | 39. U | • | | |
| 11141-16-5 | Aroclor-1232 | 39. U | | | |
| 53469-21-9 | Aroclor-1242 | 39. U | | | |
| 12672-29-6 | Aroclor-1248 | 39. U | | | |
| 11097-69-1 | Aroclor-1254 | 39. U | | | |
| 11096-82-5 | Araclar-1260 | 30 11 | | | |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

1/10/11

39.

EPA SAMPLE NO.

| HЗ | 5J | 5 | | |
|----|----|---|--|--|

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---|---|---|
| Lab Code: DAT | 'AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35G5</u> |
| Matrix: (SOIL/SED/WATER) SOIL | | Lab Sample ID: <u>1030765021</u> |
| Sample wt/vo | l: 30.0 (g/mL) g | Lab File ID: 31101109A048,31101109B048 |
| % Moisture: 16. Decanted: (Y/N) N | | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC Date Extracted: 11/04/2010 | | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) Da | | Date Analyzed: <u>11/10/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0 | | |
| GPC Cleanup: (Y/N) Y pH: 6.9 Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup: (Y/N) Y | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: |
| | | (ug/L or ug/kg) ug/kg Q |
| 12674-11-2 | Aroclor-1016 | (ug/L or ug/kg) ug/kg Q 39. U |
| 12674-11-2 11104-28-2 | Aroclor-1016 Aroclor-1221 | (ug/ii or ug/kg/ ug/kg |
| | | 39. U |
| 11104-28-2 | Aroclor-1221 | 39. U |
| 11104-28-2 11141-16-5 | Aroclor-1221 Aroclor-1232 | 39. U 39. U 39. U |
| 11104-28-2 11141-16-5 53469-21-9 | Aroclor-1221 Aroclor-1232 Aroclor-1242 | 39. U 39. U 39. U 39. U 39. U 39. U |
| 11104-28-2 11141-16-5 53469-21-9 12672-29-6 | Aroclor-1221 Aroclor-1232 Aroclor-1242 Aroclor-1248 | 39. U 39. U 39. U 39. U 39. U 39. U 39. U |

11100-14-4

Aroclor-1268

KsA Holi

EPA SAMPLE NO.

| н35J6 |
|-------|

| Lab Name: ALS | Laboratory Group | Contract: EP | ₹05026 | |
|---------------|--------------------------------|--------------|--|--------|
| Lab Code: DAT | PAC Case No.: 40755 Mod. Ref | No.: | SDG No.: <u>H35G5</u> | |
| Matrix: (SOI) | L/SED/WATER) SOIL | Lab Sample I | D: 1030765022 | |
| Sample wt/vo | 1: 30.0 (g/mL) g | Lab File ID: | 31101109A049, 311011 | 09B049 |
| % Moisture: 3 | 5. Decanted: (Y/N) N | Date Receive | d: <u>11/03/2010</u> | |
| Extraction: | (Type) SONC | Date Extract | ed: <u>11/04/2010</u> | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyze | d: 11/10/2010 | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution | Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.6 | Sulfur Clean | up: (Y/N) <u>N</u> | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | |
| CAS NO. | COMPOUND | | NCENTRATION UNITS: g/L or ug/kg) <u>ug/kg</u> | Q |
| 12674-11-2 | Aroclor-1016 | | 51. | Ų |
| 11104-28-2 | Aroclor-1221 | | 51. | Ü |
| 11141-16-5 | Aroclor-1232 | | 51. | · U |
| 53469-21-9 | Aroclor-1242 | | 51. | U |
| 12672-29-6 | Aroclor-1248 | | 51. | U |
| 11097-69-1 | Aroclor-1254 | | 51. | U |
| 11096-82-5 | Aroclor-1260 | | 51. | U |
| 37324-23-5 | Aroclor-1262 | | 51. | U |
| 11100 14 4 | 71 1060 | | 51 | 77 |

1/10/11



REGION VIII DATA VALIDATION REPORT ORGANICS

| Case/TDD No. | to your many makes and a second and or a second and the medical and overshood | | Operable Unit |
|-----------------------|---|--------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Mini | ing District | |
| RPM/OSC Name | | | |
| Sabrina Forrest | | | · |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | H35H7 | |

Review Assigned Date: November 23, 2010 Data Validator: Fred Luck
Review Completion Date: December 14, 2010 Report Reviewer: Lesley Struthers

| Sample ID | Matrix | Analysis |
|-----------|----------------|----------------|
| Н35Н7 | Sediment | CLP – Aroclors |
| H35J7 | Soil - Surface | |
| H35J8 | | |
| H35J9 | | |
| H35K0 | | |
| H35K1 | | |
| H35K2 | | |
| H35K3 | | |
| H35K4 | | |
| H35K5 | | |
| H35K6 | · | |
| H35K7 | | |
| H35K8 | Sediment | |
| H35K9 | | |
| H35L0 | | |
| H35L1 | | |

DATA QUALITY STATEMENT

| () () (X) | Data are ACCEPTABLE accordanced by the reviewer. Data are UNACCEPTABLE accordance are acceptable with QUA | ccording to EPA | Func | | |
|---------------------|---|-----------------|------|--|--|
| PO At | tention Required? Yes | No | X | If yes, list the items that require attention: | |

ORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to the EPA document "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, SDG No. H35H7, consisted of 16 sediment / surface soil samples for CLP Aroclor analyses by SOM01.2.

The following tables list data qualifiers added to the data. (Please see Data Qualifier Definitions, attached to the end of this report.)

| Sample Number | Aroclor Compound | Qualifier | Reason For Qualification | Review Section |
|---------------|------------------|-----------|--------------------------------------|----------------|
| H35K9 | All compounds | UJ | Excessive moisture content in sample | 12 |

1. HOLDING TIMES AND PRESERVATION

| All holding times criteria were met. | | | | |
|--------------------------------------|-----------------|------|--|--|
| AROCLOR: | Yes_X_ | No | | |
| All preservatio | n criteria were | met. | | |

AROCLOR: Yes__ No_X

Comments: The soil samples were extracted within 14 days from sample collection and all extracts were analyzed within 40 days from sample extraction.

According to the Chain-of-Custody record and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2 °C. When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters.

2. INITIAL INSTRUMENT CALIBRATIONS

The multi-component target compound analyses were performed according to method requirements:

AROCLOR: Yes X No____

Comments: None.

Initial instrument calibrations were performed according to requirements and met the specified control limits listed in the functional guidelines.

AROCLOR: Yes X No____

Comments: The Mean Retention Times (RTs) for each of the three to five major peaks and the RT of the surrogates have been determined. The RT Window has been calculated as ± 0.07 for each of the three to five Aroclor peaks and ± 0.05 and ± 0.10 for the surrogates tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), respectively.

give reflector deflections between 50-100% of full scale.

At least one chromatogram from each of the Aroclor Standards yields peaks that

The concentrations of the five concentration level standards containing the Aroclors was prepared at the following concentrations 100, 200, 400, 800, and 1600 mg/mL and surrogates at 5.0, 10, 20, 40, and 80 ng/mL for TCX, and 10, 20, 40, 80, and 160 ng/mL for DCB.

The percent relative standard deviations (%RSDs) for the calibration peaks used to quantitate the Aroclors were within 20%. Summary forms and raw data were evaluated.

3. CONTINUING CALIBRATION VERIFICATION

Continuing instrument calibrations were performed according to requirements and met specified control limits listed in the functional guidelines.

AROCLOR:

Yes_X_

No___

Comments:

Continuing calibration standards were analyzed at the required frequency.

The %Ds were less than or equal to 15% for the opening Aroclor 1016/1260 standards. All %Ds for the closing Aroclor 1016/1260 standards were less than 50%.

No more than 14 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last mid-point concentration of the Aroclor Standards that ends an analytical sequence.

No more than 12 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last sample or blank that is part of an analytical sequence. Summary forms and raw data were evaluated.

4. BLANKS

The laboratory blank analysis was performed according to method requirements and met specified control limits.

AROCLOR:

Yes X

No____

Comments:

A Method blank was extracted along with the field samples at a rate of no more than 20 field samples per method blank and analyzed on the same GC/Electronic Capture Detector (GC/ECD) used for the field samples.

An acceptable instrument blank was run at the completion of the initial calibration sequence. Also an acceptable instrument blank was run at the beginning and ending of the analytical sequence for this sample delivery group.

A sulfur cleanup was not required; therefore a sulfur cleanup blank was not required for this sample delivery group.



5. SURROGATE SPIKES

Surrogate compound recovery analysis was performed according to method requirements and results met specified control limits.

AROCLOR:

Yes X No

Comments:

Two surrogate spikes, tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), were added to all samples, including Matrix Spike / Matrix Spike Duplicate (MS/MSDs), Laboratory Control Samples (LCSs), and blanks.

The surrogate percent recoveries (%Rs) were all within the QC limits (30-150%) for all samples. Summary forms and raw data were evaluated.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSDs)

Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were performed according to method requirements and results met recommended recovery and precision limits.

AROCLOR:

Yes X No____

Comments:

MS/MSD analyses were performed on sample H35H7. The percent recoveries and relative percent differences (RPDs) for the Aroclor MS/MSD analyses were within QC limits. Summary forms and raw data were evaluated.

7. LABORATORY CONTROL SAMPLE (LCS)

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). The percent recoveries for the LCS analyses were within QC limits. Summary forms and raw data were evaluated.

AROCLOR:

Yes X

No ___

Comments:

None.

8. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

AROCLOR:

Yes____No_X

Comments:

The SDG shows no indication of EPA Region 8 initiating any additional QA /

QC.



9. GEL PERMEATION CHROMATOGRAPHY (GPC) PERFORMANCE CHECK

The gel permeation chromatography (GPC) check was performed according to requirements and all spike compounds were within the specified quality control limits.

AROCLOR:

Yes X

No___

Comments:

The GPC calibration appears acceptable based upon review of the two.

10. TARGET COMPOUND IDENTIFICATION

The sample results were reviewed and all compound identifications were acceptable and met method requirements.

AROCLOR:

Yes X

No

Comments:

No problems with the identification of the sample results were found. All

retention times were met for the detected results.

The chromatograms do display the largest peak of any detected Aroclors at less

than full scale. The sample extract was not diluted for any of the samples.

11. GAS CHROMATOGRAPH / MASS SPECTROMETOR (GC/MS) CONFIRMATION

GC Confirmation of detected Aroclors has been confirmed

AROCLOR:

Yes___No_X

Comments:

The on-column concentrations for each individual peak belonging to an Aroclor were reviewed for the raw data associated with each Form I ARO for the SDG. None of these raw concentrations equaled or exceeded 10 ng/ μ L, which equates to 10 μ g/mL, therefore none of the on-column concentrations are adequate to necessitate approaching the Region to obtain permission to perform GC/MS

confirmation.

12. COMPOUND QUANTITATION AND REPORTED CONTRACT REQUIRED QUANTITATION LIMITS (CRQLs)

The reported quantitative limits and CRQLs are accurate and unqualified

AROCLOR:

Yes No X

Comments:

Compound quantitations, as well as CRQLs were adjusted according to the

equations provided in the method.

The percent moisture for sample H35K9 was determined to be 81%, which exceeds the 70.0% level, but is less than 90%. The results for this sample are therefore to be qualified as UJ for each of the target analytes.

13. OTHER COMMENTS NOT ADDRESSED ELSEWHERE

1) Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

ORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

EPA SAMPLE NO.

| Н35Н7 | |
|-------|--|

| Lab Name: ALS | S Laboratory Group | Contract: EPW | 105026 | |
|---------------|--------------------------------|---------------|--|--------|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Red | f No.: | SDG No.: <u>H35H7</u> | |
| Matrix: (SOI | L/SED/WATER) <u>SOIL</u> | Lab Sample I | D: 1030766001 | |
| Sample wt/vo | 1: 30.0 (g/mL) g | Lab File ID: | 20101108A035,2010110 | 08B035 |
| % Moisture: 1 | 8. Decanted: (Y/N) N | Date Received | d: 11/03/2010 | |
| Extraction: | (Type) SONC | Date Extracte | ed: 11/04/2010 | |
| | Extract Volume: 5000 (uL) | Date Analyze | d: 11/09/2010 | |
| | lume: 2.0 (uL) GPC Factor: 2.0 | | | |
| • | (Y/N) Y pH: 6.6 | | | |
| | : (Y/N) <u>Y</u> | | | |
| CAS NO. | COMPOUND | | CENTRATION UNITS: J/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | 40. | Ū |
| 11104-28-2 | Aroclor-1221 | | 40. | U |
| 11141-16-5 | Aroclor-1232 | | 40. | U |
| 53469-21-9 | Aroclor-1242 | | 40. | Ü |
| 12672-29-6 | Aroclor-1248 | · | 40. | Ü |
| 11097-69-1 | Aroclor-1254 | | 40. | Ū |
| 11096-82-5 | Aroclor-1260 | | 40. | U |
| 37324-23-5 | Aroclor-1262 | | 40. | U |

11100-14-4

Aroclor-1268

Kohi Violii

EPA SAMPLE NO.

| | |
|-------|------|
| H35J7 | |

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030766004</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 20101108A038,20101108B038 |
| % Moisture: 35. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: 11/09/2010 |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |
| | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|---|
| 12674-11-2 | Aroclor-1016 | 51. | Ü |
| 11104-28-2 | Aroclor-1221 | 51. | Ū |
| 11141-16-5 | Aroclor-1232 | 51. | U |
| 53469-21-9 | Aroclor-1242 | 51. | Ū |
| 12672-29-6 | Aroclor-1248 | 51. | Ü |
| 11097-69-1 | Aroclor-1254 | 51. | Ū |
| 11096-82-5 | Aroclor-1260 | 51. | Ü |
| 37324-23-5 | Aroclor-1262 | 51. | Ü |
| 11100-14-4 | Aroclor-1268 | 51. | U |

12A 1/10/11

EPA SAMPLE NO.

| H35J8 | |
|-------|--|

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--------------------------------|---|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35H7</u> |
| | L/SED/WATER) SOIL | |
| | | Lab File ID: 20101108A039,20101108B039 |
| | 2. Decanted: (Y/N) N | |
| | (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/09/2010 |
| | Lume: 2.0 (uL) GPC Factor: 2.0 | |
| | (Y/N) Y pH: 6.5 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup | : (Y/N) <u>Y</u> | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg |
| 12674-11-2 | Aroclor-1016 | 42. U |
| 11104-28-2 | Aroclor-1221 | 42. Ü |
| 11141-16-5 | Aroclor-1232 | 42. U |
| 53469-21-9 | Aroclor-1242 | 42. U |
| 12672-29-6 | Aroclor-1248 | 42. U |
| 11097-69-1 | Aroclor-1254 | 42. U |
| 1100692-5 | Arogler-1260 | 42 U |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

KA

U

42.

EPA SAMPLE NO.

н35Ј9

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--------------------------------|--|
| Lab Code: DAT | 'AC Case No.: 40755 _ Mod. Re | f No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOI) | L/SED/WATER) SOIL | Lab Sample ID: <u>1030766006</u> |
| Sample wt/vol | l: <u>30.0 (g/mL) g</u> | Lab File ID: 20101108A040,20101108B040 |
| % Moisture: 3 | 4. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| | (Type) SONC | Date Extracted: 11/04/2010 |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/09/2010 |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: | (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) N |
| | : (Y/N) <u>Y</u> | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q |
| 12674-11-2 | Aroclor-1016 | 50. U |
| 11104-28-2 | Aroclor-1221 | 50. U |
| 11141-16-5 | Aroclor-1232 | 50. U |
| 53469-21-9 | Aroclor-1242 | 50. U |
| 12672-29-6 | Aroclor-1248 | 50. U |
| 11097-69-1 | Aroclor-1254 | 50. U |
| 11096-82-5 | Aroclor-1260 | 50. U |

37324-23-5

11100-14-4

Aroclor-1262

Aroclor-1268

K3A 1/10/11

Ū

50.

EPA SAMPLE NO.

| H35K0 | |
|-------|--|

| Lab Name: ALS | S Laboratory Group | Contract: E | PW05026 | |
|---------------|--------------------------------|-------------|---|--------|
| Lab Code: DAT | FAC Case No.: 40755 Mod. Ref | No.: | SDG No.: <u>H35H7</u> | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample | ID: 1030766007 | |
| Sample wt/vo | 1: <u>30.0</u> (g/mL) g | Lab File II |): <u>20101108A041,201011</u> | 08B041 |
| % Moisture: 4 | 1.5 Decanted: (Y/N) N | Date Receiv | red: 11/03/2010 | |
| Extraction: | | | eted: 11/04/2010 | |
| | | | ed: 11/09/2010 | |
| | lume: 2.0 (uL) GPC Factor: 2.0 | | | |
| | | | nup: (Y/N) N | |
| Acid Cleanup | · | | | |
| CAS NO. | COMPOUND | | ONCENTRATION UNITS: ug/L or ug/kg) ug/kg | ٠Q |
| 12674-11-2 | Aroclor-1016 | | 35. | Ü |
| 11104-28-2 | Aroclor-1221 | | 35. | Ū |
| 11141-16-5 | Aroclor-1232 | | 35. | Ü |
| 53469-21-9 | Aroclor-1242 | | 35. | U |
| 12672-29-6 | Aroclor-1248 | | 35. | Ü |
| 11097-69-1 | Aroclor-1254 | | 35. | U |
| 11096-82-5 | Aroclor-1260 | | 35. | Ū |
| 37324-23-5 | Aroclor-1262 | | 26 | |

11100-14-4

Aroclor-1268

K&A Violu

EPA SAMPLE NO.

H35K1

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030766008</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 20101108A042,20101108B042 |
| % Moisture: 12. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/09/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|---|
| 12674-11-2 | Aroclor-1016 | 38. | U |
| 11104-28-2 | Aroclor-1221 | 38. | U |
| 11141-16-5 | Aroclor-1232 | 38. | U |
| 53469-21-9 | Aroclor-1242 | 38. | Ü |
| 12672-29-6 | Aroclor-1248 | 38. | Ü |
| 11097-69-1 | Aroclor-1254 | 38. | U |
| 11096-82-5 | Aroclor-1260 | 38. | U |
| 37324-23-5 | Aroclor-1262 | 38. | U |
| 11100-14-4 | Aroclor-1268 | 38. | U |

KaA

EPA SAMPLE NO.

| H35K2 | |
|-------|--|

| Lab Name: ALS | S Laboratory Group | Contract: EPW | 05026 | · ———— |
|---------------|--------------------------------|---------------|---|-----------|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: | _ SDG No.: <u>H35H7</u> | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample II | D: 1030766009 | |
| Sample wt/vo | 1: 30.0 (g/mL) g | Lab File ID: | 20101108A043,201011 | 08B043 |
| % Moisture: 1 | 1. Decanted: (Y/N) N | Date Received | d: <u>11/03/2010</u> | |
| Extraction: | (Type) SONC | Date Extracte | ed: <u>11/04/2010</u> | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed | d: <u>11/09/2010</u> | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution | Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.8 | Sulfur Clean | p: (Y/N) <u>N</u> | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | |
| CAS NO. | COMPOUND | | CENTRATION UNITS: /L or ug/kg) ug/kg | Q. |
| 12674-11-2 | Aroclor-1016 | | 37. | U |
| 11104-28-2 | Aroclor-1221 | | 37. | Ü |
| 11141-16-5 | Aroclor-1232 | | 37. | U |
| 53469-21-9 | Aroclor-1242 | | 37. | Ū |
| 12672-29-6 | Aroclor-1248 | | 37. | Ū |
| 11097-69-1 | Aroclor-1254 | | 37. | Ū |
| 11096-82-5 | Aroclor-1260 | | . 37. | Ū |
| 37324-23-5 | Aroclor-1262 | | 37. | Ü |
| 11100-14-4 | Aroclor-1268 | | 37. | Ū |

KA Nolu

1H - FORM I ARO

AROCLOR ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

| H35K3 | |
|-------|--|

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Re | f No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: 1030766010 |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 20101108A044,20101108B044 |
| % Moisture: 6.5 Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/09/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|-----|
| 12674-11-2 | Aroclor-1016 | 35. | U |
| 11104-28-2 | Aroclor-1221 | 35. | Ü |
| 11141-16-5 | Aroclor-1232 | 35. | U |
| 53469-21-9 | Aroclor-1242 | 35. | Ü |
| 12672-29-6 | Aroclor-1248 | 12. | J |
| 11097-69-1 | Aroclor-1254 | 35. | . Ü |
| 11096-82-5 | Aroclor-1260 | 35. | Ū |
| 37324-23-5 | Aroclor-1262 | 35. | Ū |
| 11100-14-4 | Aroclor-1268 | 35. | Ü |

KA

EPA SAMPLE NO.

| H35 | K4 |
|-----|----|

| Lab Name: ALS | Laborato | ory Group | | | | Contract: | EPW05026 | |
|----------------------|------------------|--------------------|------------|---------------|-----|-----------|--|--------|
| Lab Code: <u>DAT</u> | AC | Case No.: | 40755 | Mod. | Ref | No.: | SDG No.: <u>H35H7</u> | |
| Matrix: (SOI) | L/SED/WAT | ER) SOIL | | | | Lab Sampl | e ID: 1030766011 | |
| Sample wt/vol | L: <u>30.0</u> | (g/mL |) <u>g</u> | | | Lab File | ID: 20101108A045,2010110 |)8B045 |
| % Moisture: 1 | 0 | Decanted: | (I/N) | 1 | | Date Rece | ived: 11/03/2010 | |
| Extraction: | (Type) <u>SO</u> | NC | | | | Date Extr | acted: <u>11/04/2010</u> | |
| Concentrated | Extract | Volume: <u>500</u> | 0 | (uI | ۱) | Date Anal | yzed: <u>11/09/2010</u> | |
| Injection Vol | Lume: <u>2.0</u> | (uL) GP | C Factor | r: <u>2.0</u> | | Diluti | ion Factor: 1.0 | |
| GPC Cleanup: | (Y/N) <u>Y</u> | рН: <u>6</u> | . 7 | | | Sulfur Cl | eanup: (Y/N) N | |
| Acid Cleanup | (Y/N) <u>Y</u> | <u> </u> | | | | | | |
| CAS NO. | COMPOUND | | | | | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q . |

| CAS NO. | COMPOUND | (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|-----------------------|-----|
| 12674-11-2 | Aroclor-1016 | 37. | · U |
| 11104-28-2 | Aroclor-1221 | 37. | Ū |
| 11141-16-5 | Aroclor-1232 | 37. | U |
| 53469-21-9 | Aroclor-1242 | 37. | Ū |
| 12672-29-6 | Aroclor-1248 | 37. | Ū |
| 11097-69-1 | Aroclor-1254 | 37. | Ü |
| 11096-82-5 | Aroclor-1260 | 37. | Ū |
| 37324-23-5 | Aroclor-1262 | 37. | ·Ū |
| 11100-14-4 | Aroclor-1268 | 37. | บ |

KsA Holu

EPA SAMPLE NO.

| | 7 |
|-------|---|
| H35K5 | |

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | |
|--------------------------------|--------------------------------|--|--|
| Lab Code: DAT | PAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35H7</u> | |
| Matrix: (SOII | L/SED/WATER) SOIL | Lab Sample ID: <u>1030766012</u> | |
| Sample wt/vo | 1: 30.0 (g/mL) g | Lab File ID: 20101108A046,20101108B046 | |
| % Moisture: 6 | Decanted: (Y/N) N | Date Received: 11/03/2010 | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/09/2010 | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) N | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | |
| 12674-11-2 | Aroclor-1016 | 35. U | |
| 11104-28-2 | Aroclor-1221 | 35. U | |
| 11141-16-5 | Aroclor-1232 | 35. U | |
| 53469-21-9 | Aroclor-1242 | 35. U | |
| 12672-29-6 | Aroclor-1248 | 35. U | |
| 11097-69-1 | Aroclor-1254 | 35. U | |
| 11096-82-5 | Aroclor-1260 | 35. U | |
| 37324-23-5 | Aroclor-1262 | 35. U | |
| 11100-14-4 | Aroclor-1268 | 35. U | |

K=A 1/10/11

EPA SAMPLE NO.

| | _ |
|-------|-------|
| H35K6 | |

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030766013</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 20101108A047,20101108B047 |
| % Moisture: 9.6 Decanted: (Y/N) N | Date Received: 11/03/2010 |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/09/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Ω |
|------------|--------------|--|---|
| 12674-11-2 | Aroclor-1016 | 36. | ΰ |
| 11104-28-2 | Aroclor-1221 | 36. | Ū |
| 11141-16-5 | Aroclor-1232 | 36. | Ü |
| 53469-21-9 | Aroclor-1242 | 36. | Ū |
| 12672-29-6 | Aroclor-1248 | 36. | U |
| 11097-69-1 | Aroclor-1254 | 36. | Ü |
| 11096-82-5 | Aroclor-1260 | 36. | Ū |
| 37324-23-5 | Aroclor-1262 | 36. | Ü |
| 11100-14-4 | Aroclor-1268 | 36. | Ü |

LA Violi

EPA SAMPLE NO.

| H35K7 | |
|-------|--|
| H33K/ | |
| | |

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. | Ref No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: 1030766014 |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 20101108A048,20101108B048 |
| % Moisture: 16. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL |) Date Analyzed: <u>11/09/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|---|
| 12674-11-2 | Aroclor-1016 | 39. | Ū |
| 11104-28-2 | Aroclor-1221 | 39. | Ü |
| 11141-16-5 | Aroclor-1232 | 39. | ט |
| 53469-21-9 | Aroclor-1242 | 39. | Ū |
| 12672-29-6 | Aroclor-1248 | 39. | Ü |
| 11097-69-1 | Aroclor-1254 | 39. | Ü |
| 11096-82-5 | Aroclor-1260 | 39. | U |
| 37324-23-5 | Aroclor-1262 | 39. | U |
| 11100-14-4 | Aroclor-1268 | 39. | Ü |

12A Violi

EPA SAMPLE NO.

| H35K8 | |
|-------|--|

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 | | |
|---------------|--------------------------------|--|--|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Re | f No.: SDG No.: <u>H35H7</u> | | |
| Matrix: (SOII | L/SED/WATER) SOIL | Lab Sample ID: 1030766015 | | |
| Sample wt/vol | l: <u>30.0</u> (g/mL) <u>g</u> | Lab File ID: 20101108A049,20101108B049 | | |
| % Moisture: 2 | 5. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> | | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: <u>11/09/2010</u> | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | |
| GPC Cleanup: | (Y/N) Y pH: 6.5 | Sulfur Cleanup: (Y/N) N | | |
| Acid Cleanup: | (Y/N) <u>Y</u> | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q | | |
| 12674-11-2 | Aroclor-1016 | 44. U | | |
| 11104-28-2 | Aroclor-1221 | 44. U | | |
| 11141-16-5 | Aroclor-1232 | 44. U | | |
| 53469-21-9 | Aroclor-1242 | 44. U | | |
| 12672-29-6 | Aroclor-1248 | 44. U | | |
| 11097-69-1 | Aroclor-1254 | 44. U | | |
| 11096-82-5 | Aroclor-1260 | 44. U | | |
| 37324-23-5 | Aroclor-1262 | 44. U | | |
| 11100-14-4 | Aroclor-1268 | 44. U | | |

KoA Violii

EPA SAMPLE NO.

| н35К9 | |
|-------|--|
| | |

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H35H7</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: 1030766016 |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 20101108A050,20101108B050 |
| % Moisture: 80. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/09/2010</u> |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) N |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |] |
|------------|--------------|--|---|------------|
| 12674-11-2 | Aroclor-1016 | 160 | Ü | ٦ |
| 11104-28-2 | Aroclor-1221 | 160 | U | ٦, |
| 11141-16-5 | Aroclor-1232 | 160 | Ū | L |
| 53469-21-9 | Aroclor-1242 | 160 | U | ٦u |
| 12672-29-6 | Aroclor-1248 | 160 | Ŭ | <u>]</u> د |
| 11097-69-1 | Aroclor-1254 | 160 | Ū |]l |
| 11096-82-5 | Aroclor-1260 | 160 | Ū |]ر |
| 37324-23-5 | Aroclor-1262 | 160 | Ü |]c |
| 11100-14-4 | Aroclor-1268 | 160 | Ū | ٦۷ |

12=A

EPA SAMPLE NO.

| | | | | | |
|-----|---|-----|----|------|--|
| H 3 | 1 | iΤ. | n. | | |
| 11- | - | , | • | | |

| Lab Name: ALS Laboratory Group | | | Contract: | EPW05026 | | | |
|--------------------------------|------------------|---------------------|---------------|----------------------------|--|------|--|
| Lab Code: DAT | <u>rac</u> | Case No.: 40755 | Mod. Re | f No.: | SDG No.: <u>H35H7</u> | | |
| Matrix: (SOII | L/SED/WAT | PER) SOIL | <u>.</u> | Lab Sampl | e ID: <u>1030766017</u> | | |
| Sample wt/vol | 1: 30.0 | (g/mL) <u>g</u> | <u> </u> | Lab File | ID: 20101108A051,20101108 | B051 | |
| % Moisture: 1 | L9. | Decanted: (Y/N) | N | Date Rece | ived: 11/03/2010 | | |
| Extraction: | (Type) SO | NC | | Date Extracted: 11/04/2010 | | | |
| Concentrated | Extract | Volume: <u>5000</u> | (uL) | Date Anal | Date Analyzed: <u>11/09/2010</u> | | |
| Injection Vol | lume: <u>2.0</u> | (uL) GPC Factor | r: <u>2.0</u> | Dilut: | ion Factor: 1.0 | | |
| GPC Cleanup: (Y/N) Y pH: 6.7 | | | Sulfur Cl | Leanup: (Y/N) N | | | |
| Acid Cleanup: | : (Y/N) <u>Y</u> | | | | | | |
| CAS NO. | COMPOUND |) | - | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q | |

| CRC NO | COMPOUNTS | CONCENTRATION UNITS: | _ | |
|------------|--------------|------------------------------|---|--|
| CAS NO. | COMPOUND | (ug/L or ug/kg) <u>ug/kg</u> | Q | |
| 12674-11-2 | Aroclor-1016 | 41. | ט | |
| 11104-28-2 | Aroclor-1221 | 41. | Ü | |
| 11141-16-5 | Aroclor-1232 | 41. | Ū | |
| 53469-21-9 | Aroclor-1242 | 41. | Ū | |
| 12672-29-6 | Aroclor-1248 | 41. | Ū | |
| 11097-69-1 | Aroclor-1254 | 41. | U | |
| 11096-82-5 | Aroclor-1260 | 41. | U | |
| 37324-23-5 | Aroclor-1262 | 41. | Ū | |
| 11100-14-4 | Aroclor-1268 | 41. | Ū | |

1/3 A 1/10/11

EPA SAMPLE NO.

| H35L1 | |
|-------|--|

| Lab Name: ALS Laboratory Group | | | Contract: | EPW05026 | |
|--------------------------------|------------------------------|---------|--|--|----|
| Lab Code: DAT | 'AC Case No.: 40755 Mc | od. Ref | No.: | SDG No.: <u>H35H7</u> | |
| Matrix: (SOI | L/SED/WATER) <u>SOIL</u> | | Lab Sample | e ID: <u>1030766018</u> | |
| Sample wt/vo. | l: <u>30.0</u> (g/mL) g | | Lab File ID: 20101108A052,20101108B052 | | |
| % Moisture: 1 | 9. Decanted: (Y/N) N | | Date Rece | ived: <u>11/03/2010</u> | |
| Extraction: | (Type) SONC | | Date Extr | acted: <u>11/04/2010</u> | |
| Concentrated | Extract Volume: 5000 | (uL) | Date Anal | yzed: <u>11/09/2010</u> | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2 | 2.0 | Diluti | on Factor: 1.0 | |
| GPC Cleanup: | (Y/N) <u>Y</u> pH: 6.8 | | Sulfur Cl | eanup: (Y/N) N | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | | | |
| CAS NO. | COMPOUND | | | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | | 41. | Ü |
| 11104-28-2 | Aroclor-1221 | | | 41. | Ü |
| 11141-16-5 | Aroclor-1232 | | - | 41. | U |
| 53469-21-9 | Aroclor-1242 | | | 41. | Ū |
| 12672-29-6 | Aroclor-1248 | | | 41. | U |
| 11097-69-1 | Aroclor-1254 | | | 41. | Ū |
| 11096-82-5 | Aroclor-1260 | | | 41. | Ū |
| 37324-23-5 | Aroclor-1262 | | | 41. | Ü |
| 11100-14-4 | Arcalar-1268 | | | /1 | Γĭ |

KsA



REGION VIII DATA VALIDATION REPORT **ORGANICS**

| Case/TDD No. | Site N | lame | Operable Unit |
|-----------------------|-------------------|--------------|-----------------------|
| 40755 / 1008-16 | Upper Animas Mini | ing District | |
| RPM/OSC Name | · | | |
| Sabrina Forrest | | | |
| Contractor Laboratory | Contract No. | SDG No. | Laboratory DPO/Region |
| ALS Laboratory Group | EPW05026 | H36L0 | |

Review Assigned Date: November 23, 2010 Data Validator: ____ Lesley Boyd Review Completion Date: December 17, 2010 Report Reviewer: Fred Luck

| Sample ID | Matrix | Analysis |
|-----------|----------|----------------|
| H36L0 | Sediment | CLP – Aroclors |
| H36L1 | | |
| H36L2 | | |
| H36L3 | | |
| H36L4 | | |
| H36L5 | | · |
| H36L6 | | |
| H36L7 | | |
| H36L9 | | |

DATA QUALITY STATEMENT

| () | Data are ACCEPTABLE according to EP added by the reviewer. | A Functio | nal Guidelines with no qualifiers (flags) |
|------------|---|-------------|--|
| () (X) | Data are UNACCEPTABLE according to Data are acceptable with QUALIFICATION | | |
| PO At | Attention Required? Yes | No <u>X</u> | _ If yes, list the items that require attention: |

ORGANIC DATA VALIDATION REPORT

REVIEW NARRATIVE SUMMARY

This data package was reviewed according to the EPA document "USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review," June 2008.

Raw data were reviewed for completeness and transcription accuracy onto the summary forms. Approximately 10-15% of the results reported in <u>each</u> of the samples, calibrations, and QC analyses were recalculated and verified. If problems were identified during the recalculation of results, a more thorough calculation check was performed.

The data package, SDG No. H36L0, consisted of 9 sediment samples for CLP Aroclor analyses by SOM01.2.

The following tables list data qualifiers added to the data. (Please see Data Qualifier Definitions, attached to the end of this report.)

| Sample Number | Aroclor Compound | Qualifier | Reason For Qualification | Review Section |
|---------------|------------------|-----------|--------------------------------------|-------------------|
| H36L5, H36L9 | All compounds | UJ | Excessive moisture content in sample | 12 |

1. HOLDING TIMES AND PRESERVATION

| All holding times criteria were met. | | | | |
|--------------------------------------|---------|----|--|--|
| AROCLOR: | Yes_X | No | | |
| All preservation criteria were met. | | | | |
| AROCLOR: | Yes No_ | X_ | | |

Comments: The soil samples were extracted within 14 days from sample collection and all extracts were analyzed within 40 days from sample extraction.

According to the Chain-of-Custody record and case narrative, the two sample coolers were each received at a temperature of 7°C, which is outside the recommended temperature range of 4 ± 2 °C. When the sample preservation criteria are not met, but the sample analysis and extraction are within the technical holding times then professional judgment is used whether to qualify the data. No action was taken since the preservation exceedence was minimal and the extraction and holding times were well within the established parameters.

2. INITIAL INSTRUMENT CALIBRATIONS

The multi-component target compound analyses were performed according to method requirements:

Initial instrument calibrations were performed according to requirements and met the specified control limits listed in the functional guidelines.

AROCLOR: Yes X No____

Comments:

The Mean Retention Times (RTs) for each of the three to five major peaks and the RT of the surrogates have been determined. The RT Window has been calculated as ± 0.07 for each of the three to five Aroclor peaks and ± 0.05 and ± 0.10 for the surrogates tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), respectively.

At least one chromatogram from each of the Aroclor Standards yields peaks that give reflector deflections between 50-100% of full scale.

The concentrations of the five concentration level standards containing the Aroclors was prepared at the following concentrations 100, 200, 400, 800, and 1600 mg/mL and surrogates at 5.0, 10, 20, 40, and 80 ng/mL for TCX, and 10, 20, 40, 80, and 160 ng/mL for DCB.

The percent relative standard deviations (%RSDs) for the calibration peaks used to quantitate the Aroclors were within 20%. Summary forms and raw data were evaluated.

3. CONTINUING CALIBRATION VERIFICATION

Continuing instrument calibrations were performed according to requirements and met specified control limits listed in the functional guidelines.

AROCLOR: Yes_X No___

Comments: Continuing calibration standards were analyzed at the required frequency.

The %Ds were less than or equal to 15% for the opening Aroclor 1016/1260 standards. All %Ds for the closing Aroclor 1016/1260 standards were less than 50%.

No more than 14 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last mid-point concentration of the Aroclor Standards that ends an analytical sequence.

No more than 12 hours elapsed from the injection of the instrument blank that begins an analytical sequence and the injection of the last sample or blank that is part of an analytical sequence. Summary forms and raw data were evaluated.

4. BLANKS

The laboratory blank analysis was performed according to method requirements and met specified control limits.

AROCLOR: Yes X No No

Comments: A Method blank was extracted along with the field samples at a rate of no more than 20 field samples per method blank and analyzed on the same GC/Electronic Capture Detector (GC/ECD) used for the field samples.

An acceptable instrument blank was run at the completion of the initial calibration sequence. Also an acceptable instrument blank was run at the beginning and ending of the analytical sequence for this sample delivery group.

A sulfur cleanup was not required; therefore a sulfur cleanup blank was not required for this sample delivery group.

5. SURROGATE SPIKES

Surrogate compound recovery analysis was performed according to method requirements and results met specified control limits.

AROCLOR:

Yes_X_

No

Comments:

Two surrogate spikes, tetrachloro-m-xylene (TCX) and decachlorobiphenyl (DCB), were added to all samples, including Matrix Spike / Matrix Spike Duplicate (MS/MSDs), Laboratory Control Samples (LCSs), and blanks.

The surrogate percent recoveries (%Rs) were all within the QC limits (30-150%) for all samples. Summary forms and raw data were evaluated.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATES (MS/MSDs)

Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were performed according to method requirements and results met recommended recovery and precision limits.

AROCLOR:

Yes_X_

No

Comments:

MS/MSD analyses were performed on sample H36L4. The percent recoveries and relative percent differences (RPDs) for the Aroclor MS/MSD analyses were within QC limits. Summary forms and raw data were evaluated.

7. LABORATORY CONTROL SAMPLE (LCS)

The laboratory control sample (LCS) was prepared and analyzed with every twenty or fewer samples of a similar matrix, or one per sample delivery group (whichever is more frequent). The percent recoveries for the LCS analyses were within QC limits. Summary forms and raw data were evaluated.

AROCLOR:

Yes X

No

Comments:

None.

8. REGIONAL QUALITY ASSURANCE (QA) AND QUALITY CONTROL (QC)

Regional QA/QC was conducted as initiated by the EPA Region 8.

AROCLOR:

Yes No X

Comments:

The SDG shows no indication of EPA Region 8 initiating any additional QA /

QC.

9. GEL PERMEATION CHROMATOGRAPHY (GPC) PERFORMANCE CHECK

The gel permeation chromatography (GPC) check was performed according to requirements and all spike compounds were within the specified quality control limits.

AROCLOR:

Yes X

No____

Comments:

The GPC calibration appears acceptable based upon review of the two.

10. TARGET COMPOUND IDENTIFICATION

The sample results were reviewed and all compound identifications were acceptable and met method requirements.

AROCLOR:

Yes X

No____

Comments:

No problems with the identification of the sample results were found. All

retention times were met for the detected results.

None of the target analyses were identified in any of the samples. The sample

extract was not diluted for any of the samples.

11. GAS CHROMATOGRAPH / MASS SPECTROMETOR (GC/MS) CONFIRMATION

GC Confirmation of detected Aroclors has been confirmed

AROCLOR:

Yes___No_X_

Comments:

No targeted Aroclors were detected in any of the field samples; therefore GC/MS

confirmation is not required.

12. COMPOUND QUANTITATION AND REPORTED CONTRACT REQUIRED QUANTITATION LIMITS (CRQLs)

The reported quantitative limits and CRQLs are accurate and unqualified

AROCLOR:

Yes No X

Comments:

Compound quantitations, as well as CRQLs were adjusted according to the

equations provided in the method.

The percent moisture for sample H36L5 was determined to be 74%, which exceeds the 70.0% level, but is less than 90%. The results for this sample are

therefore to be qualified as UJ for each of the target analytes.

The percent moisture for sample H36L9 was determined to be 78%, which exceeds the 70.0% level, but is less than 90%. The results for this sample are therefore to be qualified as UJ for each of the target analytes.

13. OTHER COMMENTS NOT ADDRESSED ELSEWHERE

1) Page 1 of the Evidence Audit Checklist (EAC) indicates three airbills are associated with this SDG, however documentation is only provided for Airbill Number 3430, which documents the shipment of four packages. The laboratory only documented receipt of two coolers, so it is unclear as to what the other two packages were that were included on the airbill.

ORGANIC DATA QUALITY ASSURANCE REVIEW

Region VIII

DATA QUALIFIER DEFINITIONS

For the purpose of Data Validation, the following code letters and associated definitions are provided for use by the data validator to summarize the data quality.

GENERAL QUALIFIERS for use with both INORGANIC and ORGANIC DATA

- R Reported value is "rejected." Resampling or reanalysis may be necessary to verify the presence or absence of the compound.
- J The associated numerical value is an estimated quantity because the Quality Control criteria were not met.
- U J The reported quantitation limit is estimated because Quality Control criteria were not met. Element or compound was not detected.
- N J Estimated value of a tentatively identified compound. (Identified with a CAS number.) ORGANICS analysis only.
- U The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

EPA SAMPLE NO.

| H36T0 | |
|-------|--|

| Lab Name: ALS | Laboratory Group | Contract: EPW05026 |
|---------------|--|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H36L0</u> |
| Matrix: (SOII | L/SED/WATER) SOIL | Lab Sample ID: 1030767001 |
| Sample wt/vol | l: <u>30.0 </u> | Lab File ID: 19101112A031,19101112B031 |
| | | Date Received: 11/03/2010 |
| | (Type) SONC | Date Extracted: 11/04/2010 |
| | Extract Volume: 5000 (uL) | Date Analyzed: 11/12/2010 |
| | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| | (Y/N) Y pH: 6.8 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q |
| 12674-11-2 | Aroclor-1016 | 44. U |
| 11104-28-2 | Aroclor-1221 | 44. U |
| 11141-16-5 | Aroclor-1232 | 44. U |
| 53469-21-9 | Aroclor-1242 | 44. U |
| 12672-29-6 | Aroclor-1248 | 44. U |
| 11097-69-1 | Aroclor-1254 | 44. U |
| 11096-82-5 | Aroclor-1260 | 44. U |
| 37324-23-5 | Aroclor-1262 | 44. U |

Aroclor-1268

11100-14-4

KA

EPA SAMPLE NO.

| H36L1 |
|-------|

| Lab Code: DATAC Case No.: 40755 Mod. Ref No.: SDG No.: H36L0 Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: 1030767002 Sample wt/vol: 30.0 (g/mL) g Lab File ID: 19101112A032,19101112B03 % Moisture: 25. Decanted: (Y/N) N Date Received: 11/03/2010 Extraction: (Type) SONC Date Extracted: 11/04/2010 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11/12/2010 | | | | | |
|---|----|--|--|--|--|
| Sample wt/vol: 30.0 (g/mL) g Lab File ID: 19101112A032,19101112B03 % Moisture: 25. Decanted: (Y/N) N Date Received: 11/03/2010 Extraction: (Type) SONC Date Extracted: 11/04/2010 | | | | | |
| % Moisture: 25. Decanted: (Y/N) N Date Received: 11/03/2010 Extraction: (Type) SONC Date Extracted: 11/04/2010 | | | | | |
| Extraction: (Type) SONC Date Extracted: 11/04/2010 | 2_ | | | | |
| | | | | | |
| Concentrated Extract Volume: 5000 (u.L.) Date Analyzed: 11/12/2010 | | | | | |
| Concentrated Extract Volume. 5000 (day, 5000) | | | | | |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 Dilution Factor: 1.0 | | | | | |
| GPC Cleanup: (Y/N) Y pH: 6.7 Sulfur Cleanup: (Y/N) Y | | | | | |
| Acid Cleanup: (Y/N) Y | | | | | |
| CAS NO. COMPOUND CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | | | | | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|------------|--------------|--|---|
| 12674-11-2 | Aroclor-1016 | 44. | Ü |
| 11104-28-2 | Aroclor-1221 | 44. | U |
| 11141-16-5 | Aroclor-1232 | 44. | Ū |
| 53469-21-9 | Aroclor-1242 | 44. | U |
| 12672-29-6 | Aroclor-1248 | 44. | U |
| 11097-69-1 | Aroclor-1254 | 44. | Ü |
| 11096-82-5 | Aroclor-1260 | 44. | Ü |
| 37324-23-5 | Aroclor-1262 | 44. | U |
| 11100-14-4 | Aroclor-1268 | 44. | Ü |

KaA

EPA SAMPLE NO.

| Lab Name: ALS Laboratory Group | | Contract: EPW05 | 5026 | |
|--------------------------------|--------------------------------|----------------------------|---------------------|--------------|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H36L0</u> | | |
| Matrix: (SOII | L/SED/WATER) SOIL | Lab Sample ID: | 1030767003 | |
| • | | | 9101112A033,191011 | 12B033 |
| % Moisture: 4 | 8. Decanted: (Y/N) N | Date Received: | 11/03/2010 | |
| | (Type) SONC | Date Extracted | : <u>11/04/2010</u> | |
| | Extract Volume: 5000 (uL) | Date Analyzed: | 11/12/2010 | |
| | lume: 2.0 (uL) GPC Factor: 2.0 | | • | |
| | (Y/N) Y pH: 6.5 | — Sulfur Cleanup | | |
| Acid Cleanup: (Y/N) Y | | | | |
| | | CONCI | ENTRATION UNITS: | |
| CAS NO. | COMPOUND | (ug/) | L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | . 63. | ប |
| 11104-28-2 | Aroclor-1221 | | 63. | Ū |
| 11141-16-5 | Aroclor-1232 | | 63. | ט |
| 53469-21-9 | Aroclor-1242 | | . 63. | Ū |
| 12672-29-6 | Aroclor-1248 | | 63. | ט |
| 11097-69-1 | Aroclor-1254 | | 63. | U |
| 11096-82-5 | Aroclor-1260 | | 63. | U |
| 37324-23-5 | Aroclor-1262 | | 63. | Ū |
| 11100-14-4 | Aroclor-1268 | | 63. | Ü |

K=A 1/10/11

EPA SAMPLE NO.

| Lab Name: ALS | Laboratory Group | Contract: EPWU5UZ6 | | |
|--|--------------------------------|--|--|--|
| Lab Code: DAT | AC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H36L0</u> | | |
| Matrix: (SOI) | L/SED/WATER) SOIL | Lab Sample ID: 1030767004 | | |
| Sample wt/vol | L: <u>30.0 (g/mL) g</u> | Lab File ID: 19101112A034,19101112B034 | | |
| % Moisture: 2 | 0. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> | | |
| Extraction: | (Type) SONC | Date Extracted: <u>11/04/2010</u> | | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/12/2010 | | |
| Injection Vol | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | | |
| GPC Cleanup: (Y/N) Y pH: 6.8 Sulfur Cleanup: (Y/N) Y | | | | |
| Acid Cleanup: (Y/N) Y | | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: Q Q | | |
| 12674-11-2 | Aroclor-1016 | 41. U | | |
| 11104-28-2 | Aroclor-1221 | 41. U | | |
| 11141-16-5 | Aroclor-1232 | 41. U | | |
| 53469-21-9 | Aroclor-1242 | 41. U | | |
| 12672-29-6 | Aroclor-1248 | 41. U | | |
| 11097-69-1 | Aroclor-1254 | 41. U | | |
| 11096-82-5 | Aroclor-1260 | 41. U | | |
| 37324-23-5 | Aroclor-1262 | 41. U | | |
| 11100-14-4 | Aroclor-1268 | 41. U | | |

K3 A 1/10/11

EPA SAMPLE NO.

| | | | _ |
|-------|---|------|-------|
| | | | |
| TTOCT | 4 | | |
| H36L | 4 | | |
| | - | | |
| | | | |

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | |
|--------------------------------|--------------------------------|--|-------------|
| Lab Code: DAT | CAC Case No.: 40755 Mod. Ref | No.: SDG No.: H36L0 | |
| Matrix: (SOI | L/SED/WATER) SOIL | Lab Sample ID: <u>1030767005</u> | |
| Sample wt/vo | 1: <u>30.0 (g/mL) g</u> | Lab File ID: <u>19101112A035,19101112</u> | B035 |
| % Moisture: 3 | 8. Decanted: (Y/N) N | Date Received: 11/03/2010 | |
| Extraction: | (Type) SONC | Date Extracted: 11/04/2010 | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/12/2010 | |
| Injection Vo. | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) Y | |
| Acid Cleanup: (Y/N) Y | | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | 53. | Ū |
| 11104-28-2 | Aroclor-1221 | 53. | Ū |
| 11141-16-5 | Aroclor-1232 | 53. | Ü |
| 53469-21-9 | Aroclor-1242 | 53. | Ü |
| 12672-29-6 | Aroclor-1248 | 53. | U |
| 11097-69-1 | Aroclor-1254 | 53. | U |
| 11096-82-5 | Aroclor-1260 | 53. | U |
| 37324-23-5 | Aroclor-1262 | 53 | 11 |

11100-14-4

Aroclor-1268

Vs/A Nolu

EPA SAMPLE NO.

| нз | 6L5 | |
|----|-----|--|

| Lab Name: ALS Laboratory Group | Contract: EPW05026 | |
|--|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H36L0</u> | |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: 1030767008 | |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 19101112A038,19101112B038 | |
| % Moisture: 74. Decanted: (Y/N) N | Date Received: <u>11/03/2010</u> | |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 | |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: <u>11/12/2010</u> | |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | |
| GPC Cleanup: (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) Y | |
| Acid Cleanup: (Y/N) Y | | |
| | CONCENTRATION UNITS: | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q | |
|------------|--------------|--|-----|----------------------|
| 12674-11-2 | Aroclor-1016 | . 120 | Ū | <u>υ</u> : |
| 11104-28-2 | Aroclor-1221 | 120 | Ū | בט |
| 11141-16-5 | Aroclor-1232 | 120 | U | UI |
| 53469-21-9 | Aroclor-1242 | 120 | U | $\omega_{\tilde{a}}$ |
| 12672-29-6 | Aroclor-1248 | 120 | Ü . | נט |
| 11097-69-1 | Aroclor-1254 | 120 | υ | 0,7 |
| 11096-82-5 | Aroclor-1260 | 120 | Ü | v |
| 37324-23-5 | Aroclor-1262 | 120 | U | UJ |
| 11100-14-4 | Aroclor-1268 | 120 | U | UI |

KsA Wolu

EPA SAMPLE NO.

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | | |
|--------------------------------|-------------------------------|--------------------|---------------------------------------|-------|
| | AC Case No.: 40755 Mod. Ref | No.: | SDG No.: H36L0 | |
| | | | 1030767009 | |
| Sample wt/vol | : 30.0 (g/mL) g | Lab File ID: 1 | 9101112A039,1910111 | 2B039 |
| | | Date Received: | 11/03/2010 | |
| | Type) SONC | Date Extracted | 1: 11/04/2010 | |
| | Extract Volume: 5000 (uL) | Date Analyzed: | 11/12/2010 | |
| | ume: 2.0 (uL) GPC Factor: 2.0 | | | |
| | (Y/N) Y pH: 6.6 | Sulfur Cleanur | | |
| Acid Cleanup: | | | | |
| CAS NO. | COMPOUND | i i | ENTRATION UNITS: L or ug/kg) ug/kg | Q |
| 12674-11-2 | Aroclor-1016 | | 65. | Ū |
| 11104-28-2 | Aroclor-1221 | | 65. | U |
| 11141-16-5 | Aroclor-1232 | | 65. | Ü |
| 53469-21-9 | Aroclor-1242 | | 65. | U |
| 12672-29-6 | Aroclor-1248 | | 65. | Ü |
| 11097-69-1 | Aroclor-1254 | | 65. | U |
| 11096-82-5 | Aroclor-1260 | | 65. | U |
| 37324-23-5 | Aroclor-1262 | | 65. | Ū |

11100-14-4

Aroclor-1268

K3A Woh

EPA SAMPLE NO.

| Lab Name: ALS Laboratory Group | Contract: EPW05026 |
|--|--|
| Lab Code: DATAC Case No.: 40755 Mod. Ref | No.: SDG No.: <u>H36L0</u> |
| Matrix: (SOIL/SED/WATER) SOIL | Lab Sample ID: <u>1030767010</u> |
| Sample wt/vol: 30.0 (g/mL) g | Lab File ID: 19101112A040,19101112B040 |
| % Moisture: 25. Decanted: (Y/N) N | Date Received: 11/03/2010 |
| Extraction: (Type) SONC | Date Extracted: 11/04/2010 |
| Concentrated Extract Volume: 5000 (uL) | Date Analyzed: 11/12/2010 |
| Injection Volume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 |
| GPC Cleanup: (Y/N) Y pH: 6.7 | Sulfur Cleanup: (Y/N) Y |
| Acid Cleanup: (Y/N) Y | |

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q · |
|------------|--------------|--|-----|
| 12674-11-2 | Aroclor-1016 | 44. | Ū |
| 11104-28-2 | Aroclor-1221 | 44. | υ |
| 11141-16-5 | Aroclor-1232 | 44. | U |
| 53469-21-9 | Aroclor-1242 | 44. | U |
| 12672-29-6 | Aroclor-1248 | 44. | Ü |
| 11097-69-1 | Aroclor-1254 | 44. | Ü |
| 11096-82-5 | Aroclor-1260 | 44. | U |
| 37324-23-5 | Aroclor-1262 | 44. | Ü |
| 11100-14-4 | Aroclor-1268 | 44. | Ü |

UgA Violii

EPA SAMPLE NO.

| H36L9 | |
|-------|--|
|-------|--|

| Lab Name: ALS Laboratory Group | | Contract: EPW05026 | |
|--------------------------------|--------------------------------|---|--|
| Lab Code: DAT | rac Case No.: 40755 Mod. Ref | SDG No.: H36L0 | |
| | L/SED/WATER) SOIL | Lab Sample ID: <u>1030767011</u> | |
| | 1: 30.0 (g/mL) g | Lab File ID: 19101112A041,19101112B041 | |
| % Moisture: | 78. Decanted: (Y/N) N | Date Received: 11/03/2010 | |
| | (Type) SONC | Date Extracted: 11/04/2010 | |
| Concentrated | Extract Volume: 5000 (uL) | Date Analyzed: 11/12/2010 | |
| Injection Vo | lume: 2.0 (uL) GPC Factor: 2.0 | Dilution Factor: 1.0 | |
| GPC Cleanup: | (Y/N) Y pH: 6.6 | Sulfur Cleanup: (Y/N) Y | |
| Acid Cleanup | : (Y/N) <u>Y</u> | | |
| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg Q | |
| 12674-11-2 | Aroclor-1016 | 150 U (| |
| 11104-28-2 | Aroclor-1221 | 150 U C | |
| 11141-16-5 | Aroclor-1232 | 150 U C | |
| 53469-21-9 | Aroclor-1242 | 150 U L | |

12672-29-6

11097-69-1

11096-82-5

37324-23-5

11100-14-4

Aroclor-1248

Aroclor-1254

Aroclor-1260

Aroclor-1262

Aroclor-1268

KsA Woly

UI

UJ

Ü

U

150

150

150

150

150